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WEBL Nestbox Census

Area 5

Year: 2012

Box #	date	date	date	date	date	date
162						
111						
110						
112						
161						
160						
159						
33						
113						
109						
32						
358	24 Jan 2012					
31						
30	24 Jan 2012					
10						
9						

Incomplete
CVR
Stop 2/29/12

R. L. Mumme

1981

Hastings Reservation
Journal &

Species accounts

1981

Ronald L. Mumme

1

JournalMono Lake, Mono County CA

1 Jan Started the New Year by climbing Granite Mnt with D. Winkler, B. McCaffery, D. ~~W~~ Taylor, C. Teare, and Emily (?), of the Mono Lake Committee. A very nice walk. Went to Mammoth in the evening for a Pizza dinner and "The Empire Strikes Back."

2 Jan Returned to Berkeley with Dave + Brian, dessert with Cindy,

3-5 Jan Berkeley, Paul Sherman in town, etc.

6 Jan Returned to Hastings with Walter just after dark

Hastings Reservation, Monterey County CA

7 Jan Watched some at Rd 3 + Finch after washing clothes and getting organized in the morning.

8 Jan Watched at Low Hay in the AM, Natalie Demong here in the lunchtime. Road 1 in late afternoon, roosting there, too.

9 Jan Acorn weighing + poor watches at Buckeye. Nancy arrives today. Roosting at CA2, and a movie at the Carmel Valley Library "Le Petit Theatre de Jean Renoir"

10 Jan Fooled around at Blomone + Gazebo, weighed acorns, looked for thrushes on School Hill, roosting at School Hill

11 Jan Ran the mist nets for thrushes in the AM, weighed acorns, Baked a cake. dessert in the cabin with Nancy, the Griffins,

12 Jan Did the SHill winter bird census with Walter, excellent watches at Finch, Rd 1, Gate, + W Gate, a great deer kill in Square Nail Flat, weighed bugs.

13 Jan SHill plot census, watched at 1800, weighed acorns, a short run, (deer-kill totally devoured + moved!), worked on Joste et al with Nancy,

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- 14-20 Jan Berkeley: Study list, candidacy, Electrophoresis triumph with the Plaque birds, Census stuff with Pete, Good Old Persons at Freight & Salvage, Lunch with Frank regarding Bill Carmen. Return to Hastings 20 Jan, help Walter with ladders, good dinner with Nancy, checked Pitfall traps.
- 21 Jan Watched a bit at Hay-Blom, weighed acorns, set ambush at School Hill.
- 22 Jan Successful ambush at SHill, getting the blood of ♂86. An Orange-crowned warbler by the Griffins, then R/EN! A nice rain, starting about 1100 and continuing through the night. I analysed acorn data. Dinner at Red House with Walter, John & Steve.
- 23 Jan An off+on rainy day. I snuck a quick watch at Plaque, talked with Walter about the ♀ paper. "Here comes Mr. Jordan" at the Carmel Valley Library with Walter & Pam.
- 24 Jan ^{Partly} Cloudy, cool, windy, light rain in the evening. Rex Merrill Steve Ruzin show up to take Gwen's stuff away in the afternoon. Nice dinner & chat with them. Earlier I watched at 1500.
- 25 Jan Beautiful clear day. Censused the School Hill plot, watched the School Hill woodpeckers, went for a little run.
- 26 Jan Cloudy windy, misty all day. I waste a lot of the day pounding around ARF and Warp 5, not getting a look at any woodpeckers. "1941" at the Hardy's, a pretty funny movie.
- 27 Jan Hard rain all day. I hardly set foot outside

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- (27 Jan) the cabin all day. Nancy returns from Taft Mountain View - Berkeley. We watch it rain, I work some on Joste et al, fill out tax returns, etc.
- 28 Jan Cabin fever. The rain lets up enough for me to fool around trying to quantify the madrone and toyon crop on School Hill. Then more rain. A good 5-mile run with Varelar
- 29 Jan Rain all day, pretty much. Walter and I did the Arnold Road in the afternoon. Walter comes over for dinner, I talk with Cindy on the phone. A few snowflakes on the Arnold, but just rain down here
- 30 Jan A bit of snow here early in the AM, a fair amount on the Arnold, PO hill, upper Buckeye - Palo Escrito, and lots on Chews Ridge. Big date with Nancy (dinner at wills), Hastings "old days" movies.
- 31 Jan A clear day, believe it or not. I wash clothes, do a census on School Hill, do bugs, read & paper, get ready for Berkeley.
- ~~1 Feb~~
- 1 Feb Berkeley, David Gisman, etc
- 5 Feb Return from Berkeley. Dinner at Red House with Walter.
- 6 Feb Spend all day wandering around on the Arnold. Dinner at the Harays. Bill Carman arrives for weekend. Movie, "Ulysses" at the CU library.
- 7 Feb Another day on the Arnold, and I find a new group Roosting at Road 1.
- 8 Feb Wet & windy all day. I collect bugs, & that's it.
- 9 Feb Nancy returns today. John Emken here visiting. Dessert at the Davis. I do some toyon-madrone censusing.

1981

R.L. Mumme

Journal

Hastings Reservation

10 Feb Walter + I stroll around with John Emlen early, then I do a census on School Hill, and a watch at Lower Haystack. A 6-mile run with Nary. Warm, very spring-like day. Lots of moths of some kind flying through the oak woods.

11 Feb Cloudier, but still warm. I watch at Rd 3, 1800, bake cookies + dinner, and a 5-mile run with Nancy. Nice after-dinner conversation.

12 Feb I do a census on School Hill, then go up to the Arnold,
for unsuccessful day watches at SOBO + BO, but successful
roostings at SOBO and LA2

13 Feb Windy, cloudy, a trace of rain in the AM. I work on Joste et al with Nancy, clean up, change mandolin strings, go shopping with Nancy. Return, go for a run (5 miles), find out that Kurt, Stan et al are not coming for a visit this weekend. Bummer. JoAnne up for dinner

14 Feb Not much today. A poor watch at Road 1. Worked on Joste et al. Progressive dinner in the evening.

15 Feb More work on Joste et al. ~~Adamsburg~~ ~~run~~ ~~up~~ ~~Arnold~~
~~Arnold~~ Run part way up Arnold

14 Feb ~~Plenty of success~~ ambushes ~~at~~ set at LA2 SOBO,
in the afternoon. I picked up bags early. Waste
et al some more

17 Feb Partial ambush success at LA2, Walter & I patch up westgate granary. Trip into town for CNPS

18 Feb Wash, try to fix bins, Nancy leaves for Berkeley. Ambush 5000

19 Feb Long ambush at SOBO, 3 birds. nap, poor watch at Finch. Prep for leaving for Berkeley.

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- 20 - 25 Feb - Berkeley. ^{Peter}~~Steve~~ Waser, Treasure of Sierra Madre, Gene Flow.
- 26 Feb Return to Hastings around noon, nine mile run with Nancy.
- 27 Feb Nice day, but I work on Concord Fallacy all day. Dinner at Bunkhouse with Joanne, Nancy, the Pattons. Griffiths added for desert at the cabin.
- 28 Feb Rainy day. I futz around. Good date with Nancy to Italian Restaurant in Village. Lots of fun.
- 29 March Another rainy day. I work on Joste et al. with Nancy, a lethargic 5-mile run.
- 2 March No rain, but cloudy, but productive. Good watches at Blomont + Gazebo, plus a Golden Eagle eating an Arctic Loon, and a prairie Falcon over by the ponds. Pitfall city.
- 3 March Gray & cold + cloudy. I work on Joste et al., a run up Martin Rd with Joanne, Nancy + Walter. Fun Mardi Gras party at the Cabin, then a pitfall check.
- 4 March Hard rain all day. Nancy leaves for Berkeley, I get a lot of typing done on Joste et al.
- 5 March Clearing, but very cold. Work some more on Joste et al., chop wood, goof off, etc. Talked to Laurie this evening.
- 6 March Good watch up on School Hill. First Violet Green Swallow up there, plus White-throated Swifts. Joste et al., and a great movie, Holiday, at the library.
- 7 March Joste et al., good watches at Hay-Blom + 1500. Dessert at the Griffiths.
- 8 March Nancy returns. Good watches at White Gate.

Journal

Hastings Reservation

- 9 March Good watches at Finch + Rd. 1. Walter gets news he's in at Occidental! Cheesecake + keish celebration at the cabin. Nancy + I camp out at Paradise garden.
- 10 March Wash clothes, work on Joste et al all day. Cheesecake + champagne at Bunkhouse. Marsh Hawk on Red Hill in the afternoon.
- 11-14 March Berkeley, Davis, Jerram Brown, etc. Return to Berkeley 1300 14 March, 10-mile run to the pass with Nancy.
- 15 March Picked up bugs, Fooled around a bit, then rain in the afternoon.
- 16 March A poor watch at Road 3, interrupted by heavy equipment working on the road. Grocery shopping with JoAnne + Nancy in the afternoon.
- 17 March Pretty good watches at Low Hay and 1800.
- 18 March Poor weather, I futz around in the lab
- 19 March " " " " " " " " China syndrome at the Hardy's
- 20 March " " " " " " " " Movie
- 21 March Cry the beloved country at the library. walk up Red Hill
- 22 March Lab work, Walter + I put up Fake nest hole at Rd. 1. Jane Baxter + Anne Joste here visiting Nancy.
- 23 March Nice day. I watch at Buckeye. dinner in the cabin with Nancy + friends,
- 24 March A very quick watch at Plaque in the morning, Then lab work as it clouded up in the afternoon.
- 25 March Semi-rainy. Lab work, then a trip into town with

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- (25 March) Nancy in the afternoon to get boots fixed, see rails. Crespi pond provides ~~no~~ soras (lots) but no Virginia rails. Thendinner with Joanne, Pam & Walter at Fernands (French restaurant) in the village.
- 26 March Hard nasty rain almost all day. More demography work in the lab. Run up Martin Rd with Joanne, Nancy & Walter.
- 27 March Clear, but cool & breezy. Demography work in the a.m. & p.m., then "goodbye Nancy" party at the Hardy's.
- 28 March Nancy leaves today, but not until after I hear the first Oriole down by the labs. Also House Wren. Watch at Road 3 & Finch. Astrollover to gazebo, I climb up to the "new" nest hole at Rd 1 to patch it up, secure it better.
- 29 March Leave for Berkeley about noon, after a quick walk 6-1 1500 & 1800, and a bogus "Black-tailed Gnatcatcher" (just a weird Blue-gray) down by the pump.
- 30-31 Berkeley, return to Hastings late 31 March.
- 1 April Like a fool, I try to watch at Rd 1 in the rain, then move on to Road 3.
- 2 April A bit more successful watch at Rd 1 & Rd 3 again, a good watch at Plaque.
- 3 April Fake egg introduction & boring watch at Rd 3, good watch at S/Hill, ambush set at Finch. Dessert at Griffins.
- 4 April A good day. Take down the ambush at Finch, find fake egg gone from Road 3, good watch at 1500, Low Hay (start of revolution!) and Gazebo.
- 5 April Ok watch at Plaque, then good revolution watch at Low Hay, despite hellish experience with mistnets. Rd 3 nest check. Bugs.

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- 6 April Good watches at Rd 1 and Rd 3, Then an OK photo session and good revolution watch at Lower Haystack.
- 7 April Excellent revolution action at Low Hay, then a drive up to the Arnold, poking around at Black Oak, LA2, Bianca, SOB0.
- 8 April One last watch at Low Hay, a short watch at Rd 3, a trip into town, ^{Mary Peacock} Frank arrives today, dinner at Red House.
- 9 April quick watch at Road 1, conferencia with Frank, nest check at Rd 3, watch at Plaque, Dinner at Wills.
- 10 April Another Plaque watch, nest check ~~at~~ at Rd 3 and a quick watch at Gate with Mary Peacock.
- 11 April Steve Emilen + Nataliz Den-ong arrive, Frank leaves, I watch at Rd 3, walk with Walter + the Emilens, watch at 1500 + 1800, show Mary School Hill. Byron Wilson arrived today. Nice dinner at Red House with the Emilens.
- 12 April Early watch at Plaque, then Rd 1 + gate. Help Byron a bit, show Byron + Mary Haystack, 1800, 1500. Walter opens hole at Gate, I check nest at Rd 3 + Plaque after Byron reports seeing a ♀ wicker carrying an eggshell.
- 13 April I watch early at Plaque, the Road 3, the Gate. Then nest checks at Rd 3, Rd 1.
- 14 April Exciting day at Plaque, although the details unclear. I also check up on Rd 1, show Mary 1500, Find the nest at Plaque, watch there.
- 15 April More Plaque business. A quick watch at Low Hay. Plaque added a new twist, 2 separate nests (!)

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- 16 April Watched at Plaque early for egg-laying. Tried a watch at Rd 1 without much success, but I did replace the string that fell from the nest limb (for ropeladder). Checked nests at Rd 3 and Gate, watched roosting at Plaque.
- 17 April Another early morning Plaque watch, then a quick watch at Rd 1 revealed a second nest (by ♀269) in the making. I climb up to that nest (quite a chore) open the hole (easy) find no eggs, (simple), then try to put the hole back together (not easy.) Nestcheck ~~at Rd 1~~ at Rd 3, (roosting at Rd 3 also). Then a great party in "The Antler Room", hosted by Byron.
- 18 April A memorable day! Egg-tossing extravaganza at Road 1. Then rain & regrouping, writing notes, baking, etc. Egg-toss party and easter egg hunt at Red House.
- 19 April Less memorable, nasty, rainy morning at Road 1. Long watch there, then a quick watch at Plaque and a hike up to Buckeye. Roosting at Gate.
- 20 April Last of the egg-toss days at Rd 1, a watch at Low Hay and a swing by Gazebo. Watch at ~~1800~~ 1800, nest check at Gate. Roosting at Rd 1.
- 21 April Basically a shitty day. Another egg at Rd 1, nest check at Rd 3 (complete clutch!), then disaster! Plaque sneaks in a nest with 2 eggs in the upper hole of the two Buckeye canyon holes. Many reports, ♀604 (of ~~the~~ Low Hay) back home at School Hill.
- 22 April Laying watch at Plaque, watch at Low Hay, 1800. Nestcheck at Gate, roosting at Road 1.

JournalHastings Reservation23 April

Nest checks at Plaque, School Hill. Egg introduction at Road 3. Good watch at Gate, and a quick dip in the swimming hole ~~at~~ on this hot day. Day started with a revolution watch at Blomone. A very boring watch at Plaque in the evening (roosting, too)

24 April

A dull time trying to photograph "egg-tossing" at Hay Blom, good revolution action at Blomone, lunch, nest check at Plaque, walk up School Hill + Still West. Movie, "Dressed to kill," at the library. Patton arrives for Biosystematists meeting.

25 April

Watch at Low Hay early, quick check on revolution action at Blomone, nest check at Rd 3, a look at Gate, talk with the Biosystematists, nest check at Plaque, discovery of nest at 1500, some plaster egg construction, and roosting at Road 1.

26 April

First day of daylight time, but this year I will record all data in PST. Cold, cold watch at Hay Blom, unsuccessful attempt to photograph egg-tossing. Watch at 1500. Roosting at Road 1. Evening watch at 1800

27 April

Morning watch at 1500, 1800. Nest check ¹⁵⁰⁰ ~~at~~ Gate, Rd 3. Trip up to the Arnold in the afternoon. School Hill for Roosting

28 April

Early watch at Low Hay, nest check at 1500. Walk by Gazebo, Blomone, Hay Blom nest check, watch at 1800, Road 1 for roosting.

29 April

Lower Haystack early again, Nest checks at School Hill and Plaque, some Photography, Swimming hole action

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- (29 April) on this very hot day, then a nest check at 1500, and a late watch and roosting at 1800.
- 30 April Low Hay early, a walk by Gazebo + Blomone, a look at Finch + Warp 5, good watch + nest check at Gate, moved the hide out to 1500, and watched roosting at School Hill
- 1 May Early watch at Low Hay, fooling around the lab, egg dice removal and ~~egg~~ introduction at SHill + Playce, respectively. Grocery shopping, roosting at SHill.
- 2 May Frustrating watch at Low Hay. ~~again~~ then a shower and up to Berkeley for Russ + Judy's wedding. Great fun.
- 3 May Early watch at Low Hay with an egg laid by ♀528 in the 80 hole, then tossed by ♂3071. Nest check at 1500, watch at 1800, roosting at Low Hay
- 4 May Uneventful watch at Low Hay. Yesterday's egg a false start. Nap time, trip up to the Arnold with Walter + George, ~~then~~ nest check at 1800, Gate, failed roosting at Rd 1
- 5 May Spent the morning trying to get a fake egg-tossing photo at Gate, where the first egg was laid. Fooled around a warp 5, checked the hole at 1800, watched Gate through roosting
- 6 May watched early at Gate, then opened the hole at Warp 5, then a Grant party (news came yesterday), then nest check at 1800, Gate through roosting,
- 7 May Early walk up Haystack, finding the new nest at Hay Blom

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(7 May) Then Walter shows me how to work the camera at Low Hay, then I check upon 1800 + 5 Hill West, then open the nest at 1800, count the eggs at Gate, then watch 1800 through roosting.

8 May Early morning watch at Low Hay, complete with a runt egg at the roost hole, which I manage to break. Oh, well. Nest check at School Hill, then dinner at Wills' and @ "The man in the white suit" at the library.

9 May Another early AM at Low Hay, then peeping nest checks at 1800 + Reaching nest checks at Gate 3 trips up Haystack today, waiting (in vain) for an egg laid by ♀524 to be tossed.

10 May Frustrating morning at Low Hay, but followed by good news that ♀523 tossed ♀524's egg (see Low Hay). Called Mom + Bob, napped, transcribed tapes, roosting at Low Hay.

11 May Another day, another egg tossed at Low Hay (unfortunately, missed by Byron) napping, nest checks at 1500 + 1800, then another late watch at Low Hay. Successful roosting at 1800.

12 May Excellent early watch at Low Hay. Then the usual relaxing, napping, note-transcribing, and notebook organizing until roosting at School Hill.

13 May Both ♀♀ lay at Low Hay today, ending egg-tossing. Nest check at Gate, I find a nest at Gazebo, and watch poorly at Blow-one. Nest check SHill.

1981

R.L. Munne

63

Journal

Hastings Reservation

- 14 May Slept late, watched briefly at Low Hay, then poorly in bad weather at Blom one, then returned to low Hay for a nest check and to bring the movie camera down. Then fooling around on the Arnold, Dinner at Red House
- 15 May Slept late, transcribing tapes in the morning. Nest check at Low Hay, carry the ladder over to Gazebo and checked the nest there, Then boogied into town for some grocery shopping. Nest check at Gate
- 16 May Very bizarre & distressing watch at Low Hay, then a routine nest watch at Gazebo. Roosting at Rd 1, then slide show at Red House
- 17 May A more encouraging watch at Low Hay, with a nest check. Then a trip up to the Arnold for LA2 + SOBO duty, then nest check at 1500 and nest watch at Gazebo
- 18 May Early watch at Blom-one in poor weather, nest check and egg-injection at Gate, nest check at Low Hay + Blom one. Roosting at 1800. Also watched at Finch.
- 19 May Watched the nest at Gazebo early, then relaxed & wrote a letter during some rain, then nest check at 1800 a mini-slide show of egg-tossing pictures, a check at SHill + SHill west, roosting at SHill.
- 20 May Usual dull watch at Blom-one, a check at Gazebo, then laundry & baking until 1400. Then I wandered all around Arnold Road Flats and actually found the nest at AAF 2. Also a Cooper's Hawk nest. Roosting at 1800
- 21 May Another day of nest finding, this one at SOBO (Yeah!). That took the entire afternoon. Relaxed, wrote notes, Sewed, and

JournalHastings Reservation

(21 May) did a garbage run in the morning with Walter. Nest check at 1800, and opened the nest at ARF2. Goodbye party for George Barrowclough and slide show at Red House.

22 May Usual nowhere watch at Blomone, then a good nest watch at Gazebo. Opened up the hole at SOBO, found the nest at LA2, checked the nest at Gate, the movie-time, "The man who knew too much."

23 May

24 May

25 May

26 May

27 May

28 May

29 May

30 May

31 May

JournalHastings Reservation

- 1 June Quick watch at Blomone, nestcheck at Rd 3, then up to Berkeley for the grant money conference with Frank.
- 2 June Berkeley until noon, returning exhausted about noon. Time for a nest check and a short watch at Rd 3.
- 3 June Early watch at Blomone, nestcheck + brief watch at Rd 3, poor nest watch at Gazebo, then nest check + preliminary banding at Low Hay. Nice Barbecue under the Plaque tree in the evening.
- 4 June Hot! I draw the leading + trailing ends of an all-day nest watch at 1500. In between I foolishly check the nest at Plaque, wisely check the nest at Rd 3, and check out the swimming hole.
- 5 June Usual nowhere watch at Blomone early, then a nowhere nest watch at Gazebo. That was followed by a nestcheck at Rd 3, a quick visit to Warp 5, and a long period of renovating the Swimming hole. Movie in the Village.
- 6 June Relaxed early, watched a bit at Still west, then at Road 1. Also "Firebroke" the Rd 1 granary. A short visit to the swimming hole, then banded the babies at ARF 2 (solo: my first). Roosting at gate, pot-luck dinner with Walter's PRBO class.
- 7 June A quick look at a weird mini-revolution near Blomone, then up to the Arnold with Byron for a nest watch at Black Oak and a group watch at SOBO. Assisted the Oriole gang with ladders in Corral Viejo Canyon late.
- 8 June Watched at Blom 1, looked around Blom 3, and watched at Plaque. Helped Walter band at WGate, then an excellent photography session at 1500.
- 9 June Watched poorly at Road 1, then well at Road 3. Grocery

JournalHastings Reservation

- (9 June) shopping, then another photo session at 1500.
- 10 June Spent a lot of time watching at Plaque, with some success. Washed clothes, cleaned, organized, banded the babies at 1800. Dinner at the bunkhouse.
- 11 June Good all-day nest watch at 1800; I had the 1st + last shifts, again. In between, a quick look at Blomone and a nest check at Rd 3.
- 12 June Cold + windy. Bad start, but I find the new nest at Warp 5, which Walter + I open around noon. A return to Road 1 in the afternoon. Lots of good mail today, including first roll of 1500 photos. Dinner at Red House.
- 13 June Blom-one + Rd 1 in the morning, I watch the nest a bit at ARF 2, check the nest at Rd 3, started work on the egg-toss paper, dinner in the Bunkhouse.
- 14 June Almost all day Egg-toss paperwork. Made it out of the cabin long enough to see some juvenile dominance at Plaque and check the nest at Rd 3.
- 15 June ~~Long time~~ Short, unproductive watch for babies at School Hill, and unproductive watch at Rd 1, nest check at Rd 3, Swimminghole action, roosting at Gate.
- 16 June Long watches at Rd 1, a Wilson's Phalarope excursion on Blomquist, and swimming.
- 17 June Boring watch at SHill, banding Warp 5, then 700th bird party + wild dance at the Cabin.
- 18 June Watched a bit at Blom-one early, worked on the egg-toss paper some, banded at Low Hay, swimming, then leave for Berkeley after dinner.

JournalHastings Reservation

- 19 June Berkeley, "Raiders of the Lost Ark" etc.
- 20 June Return from Berkeley in the heat of the afternoon, in time for a swimming hole run, a useless watch at 1800. Dinner in the ~~main~~ bunkhouse
- 21 June Early watch at Rd 1 + warp 5, swimming, egg-toss work, nestcheck Rd 3, more swimming, Roosting (or lack thereof) at ARF 2
- 22 June Poor watch at S Hill, then a tour of the Arnold (SOBO, BO, FA), swimming, egg-toss, dessert-making (peach cobbler) for dessert at the casino.
- 23 June
- 24 June
- 25 June
- 26 June Leave for Berkeley Early Am
- 27 June Berkeley, pick Nelson up at airport, return to Hastings
- 28 June
- 29 June Nice all-day swimming trip at the Arroyo Seco, with Pam + Walter, the Bunkhouse gang
- 30 June Checked babies at Rd 3, nest hole at Rd 1, watched some at W Gate + Gate, then 1800.
- 1 July Very successful watches at Rd 1 + Gate, then into town w/ Nelson for boat buying, sea otters, Pt. Lobos, etc.

1981

R.L. Munne

18

~~Memorandum~~JournalHastings Reservation

- 2 July Watched a Y (School Hill + Plaque birds) then 1800.
Cleaned up the cabin, returned to work on the demography paper.
- 3 July Watched briefly at School Hill early, then worked in the lab waiting for the arrival of Scott + Laura Rimbey, visited with them until the evening.
- 4 July A very low-key independence day. Watched briefly at 1800, lab work, swimming hole, flat tire.
- 5 July Leave early taking Nelson to San Francisco.
- 6 July Drop Nelson off at SF Airport, return to Hastings, a bit of lab work.
- 7 July All-day nest watch at Road 3, Party in the cabin
- 8 July Bading at Rd 3, Arroyo Seco with Janet, Bill, Joan (Janet's friend)
- 9 July Watch at School Hill
- 10 July Leave for Mono Lake to visit with ^{with assistants Mike} Green + Virginia Morris
- 11 July Mono
- 12 July Mono
- 13 July Mono, good gull banding on Krakatoa with Kay Holtecamp and her crew (Laura, Blair, Nick, Joanne)
- 14 July Return to Hastings
- 15 July Work on demography, Janet up at cabin for dinner and ^{you know} what
- 16 July Watched at gate, worked on demography + egg-tossing
- 17 July Up to the Arnold with Janet, watching at U/A2 + CA2. Then work on the egg-toss paper, roosting at ARI#2, Janet up to the cabin.
- 18 July Another excursion up to the Arnold in the (late) morning, Then more work on the egg-toss paper, dessert at Red House &

Melanerpes formicivorus
Journal

~~XXXXXX~~ Hastings Reservation

18 July stay in the bunkhouse.

19 July Watch a bit late at Rd 3, after checking the pitfall traps.
Finished up a new draft of the egg-toss paper. Slept outside

20 July Good long watches at Rd 3 + Finch

21 July Poor watch at Rd 3.

22 July Mom + Bob arrive

23 July Tourist route with Mom + Bob, Pt. Lobos, 17-mile drive,
Monterey, etc.

24 July Watched at Rd 3, Lab work (Mom + Bob at Big Sur) Visited with Janet
until late

25 July

1981 R.C. Mammie

EGG-TOSSING EXPERIMENTS

Hastings Reservation

Eggs introduced before laying

Tossed within 48 hours

	Road 3		yes
<u>16 April</u>	Gate	(25.7 x 20.0, 5.15 g)	yes
<u>27 April</u>	Gate		yes
<u>24 April</u>	Hay Blom		yes
<u>26 April</u>	Hay Blom		yes
<u>5 May</u>	Gate		no

* egg intro
(minutes before
egg #1 laid)

Eggs introduced after laying

<u>23 April</u>	Road 3	(24.3 x 20.6, 6.10 g)	no
<u>25 April</u>	School Hill		no
<u>29 April</u>	Plaque		no
^{may} 15 ~~25 April~~	~~Gate~~ Gate		no
<u>25 May</u>	Low Hay		no

Dice introduced after laying (16 x 16 x 16 mm) (5.65 g)

<u>25 April</u>	Road 3	no
<u>29 April</u>	School Hill	no
<u>1 May</u>	Plaque	no
<u>13 May</u>	~~Gate~~ Gate	no
<u>23 May</u>	Low Hay	no

1981 R.L. Mumme

Melanerpes formicivorus

FLY CATCHING DATA

Hastings Reservation

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>11 Feb</u>	1215	1800	♀193	2	2	1	3	3	3B
<u>8 March</u>	1420	612	♀601	4	2	1	2	3	1B

1981

R.L. Mumme

1

Melanerpes formicivorusBuckeye9 Jan

Start watch ~~1110~~ 1110. Not using blind, just wandering below and above granary. ^{L Grn-Yel/M} ♂619 Yellow/LG ^{LBW/w-DRK} ♂234 ^{DBLue/Yellow-LBBlue} ♂252 metal / all seen OK, plus at least 2 other birds. As usual, extremely shy. I find a nice place to watch 75m uphill of the granary.

23 March

Start from hide at granary, 1020. 1100, ♂252 ^{DBLue/Yellow-LBBlue} Metal / and ♂619 ^{L Grn-Yellow/M} Yellow/LGreen show up in the granary with, lot behold, a ♀NB. The unbanded ♀ looked a little nervous, but was not chased by either ♂252 or ♂619. Then, at 1105, the ♀NB starts harriting, whereupon ^{Red-DBLue/R-DBL} old ♀483 ^{R-DBL/R-DBLue} shows up and chases out the ♀NB. 1130, ♂504 ^{wht-Red/M} wht-Red/DBLue-w (w) turns up. 1230 Nothing more. End watch.

19 April

A walk up here to check holes at 1800. Nobody looking out anywhere. However, I did see a "pack" of 3 birds fly into the granary before they spotted me and took off. Could this be ♂234, ♂252, and the ♀, with ♂424 indeed gone?

31 Aug

A quick little watch, 0745-0845. ^{Red-DBLue/Red-DBLue} ♀483 ^{DBLue/M/Yellow-LBBlue} ♂252 and ^{Yellow-Blk/Red} ♂665 ^{M/Yellow-Black} in full adult ♂ plumage. Aren't there going to be any ♀♀ this year. Also a ♀NB intruder seems to be lurking around. No body looking interested in the granary hole, and no evidence of "packing" seen yet. ^{n/O Grn-B Prt (Narrow)}

12 Sept

♂665 at Y (see Y notes), plus ♂663, also in ♂ plumage!

16 Oct

Watching here, 0805-1005. granary census or back. Slow early, but a bit of storing activity later. Most

16 Oct 1981 Buckeye granary census 0805 - 1005

0805 nobody
 10 "
 15 "
 20 "
 25
 30
 35
 40
 45
 50 ♂234 ♂665 ♀666
 55 ♂665 ♀666

0900 nobody
 05
 10
 15
 20 ♂663 ♂665
 25 ♀666 ♂665
 30 ♀666
 35 ♀666
 40 ♀666 ♂665
 45 ♂663 ♂665
 50 ♂665 ♀666
 55 nobody
 1000 ♂663 ♂665
 05 ♂665

⑥ ♂663 / HHH
 ④ ♂665 IIII
 ① ♂252 1
 ① ♀666 1
 ① ♂234 1

0920 ♀NB ♀483
 ♂ near, no re
 0937 Junco ♂665 2

13

Melanerpes formicivorusBuckeye

(16 Oct) important thing to note is that I mis-sexed J 666: Actually is
 ** definitely in ♀ plumage. ♀ 483, ♂ 234, ♂ 252, ♂ 663,
 ♂ 665, and ♀ 666 all seen well + repeatedly. ♂ 619 and J 664
 are as yet missing.

17 Oct J 664 ^{wht / Dorn-Lorn} Lorn-Dorn / m at Y, in ♀ plumage

31 Oct Granary watch here, 1115 - 1315. Well, cut it short
 after 1 1/2 hr. No storage, very little activity
 ♂ 234 ♀ 664 ♂ 665 ♀ 666 all seen. I was also
 pretty sure I saw ♂ 252 as well. End 1245

7 Nov Another try, 1405 - 1605. 1500, some Juvenile dominance,
dominance ♂ 665 definitely pecked at ♀ 666, molt
 completed! will have to compare to Byron's notes here
 A bit storing but not much. All 4 first year birds
 seen, plus ♂ 234, ♂ 252. Only ♀ 483 and ♂ 619
 not seen today. The latter has probably disappeared.

→
 after-molt
 dominance

30 Nov Granary census, 1100 - 1300. Boring, only ♂ 663 and
 ♂ 665 seen. No storage, no defense.

31 Oct 1981 Buckeye granary census

1115 nobody
20 "
25 ♂252
30 nobody
35 "
40 "
45 ♂665
50 ♀666
55 nobody
1200 ♂665
05 "
10 nobody
15 "
20 "
25 "
30 "
35 ♂665
40 "
45 "

No storage

defense
1120 ♂252 near Nuthatch 0 (no response)

7 Nov 1981 Buckeye

1405 nobody
10 "
15 "
20 "
25 "
30 ♂665
35 "
40 "
45 "
50 ♂665 ♂252
55 ♂665
1500 "
05 ♂665 ♀666 ♂252
10 ♂663
15 nobody
20 ♂665

25 ♀664 ♂665
30 ♂252 ♂234 ♂665 ♀664 666
35 ♂252 ♂655 ♀664 ♀666
40 nobody
45 ♂252 ♀666
50 ♂665 ♂234
55 ♂665 ♀664 ♀666 ♂252
1600 "
05 " " " ♂663

Storage			
hour 1		hour 2	
♂252	11	1	(3)
♀664		11	(2)
♀666		1	(1)
♂663		11	(2)
♂665		1	(1)
♂234		1	(1)
(2)		(8)	(10)

defense
1515 ♂252 Nuthatch 1
1530 ♀664 Robins 2
1600 ♀664 Nuthatch 1

5/hr

30 Nov 1981 Buckeye 1100-1300

1100 nobody
05 "
10 "
15 ♂665
20 "
25 "
30 nobody
35 "
40 ♂663
45 ♂663 ♂665
50 nobody
55 "
1200 "
05 "
10 ♂665, ♂?
15 ♂665
20 nobody
25 "

1230 nobody
35 "
40 "
45 "
50 }
55 } cut short
1300 }

Storage

Melanerpes formicivorusChongo

19 Oct Miracle of miracles, I walk up here at 1230 and find that at long last, Chongo is occupied! About 100-200 acorns stored in the granary, and birds around!

20 Oct watching here 0750, hoping to find out who's here.
 0800, Bless her heart ♀ 565 ^w/_m ~~wt~~ / L Blue of 1800 is here, storing acorns with what appears to be just one unbanded ♂. That means that School Hill descendants are ~~now~~ now breeding at SHill, 1500, 1800, Low Hay, Hay Blom, Y (direct) and Blomone, Blon 2, and Chongo (indirect descendants). Not bad!

Anyway, a lot of other woodpeckers are here, but I suspect that they are Buckeye birds trying to use the spring (I saw ♂ 234, ♀ 666 here yesterday).

No evidence of more than a pair here, but they look pretty tight. End ~~1010~~ 0910.

10 Dec Counted stores, 1700: 330 TOTAL

Still room for a couple hundred more.

1981. R.L. Munne

Melanerpes formicivorus

Plaque

Hastings Reservation

23 Jan

Start watch 1110. Light rain by 1150, but I get a complete census. ♂473 Lgreen/wht, ♂521 Blk-yellow/M, ♀496 Mauve/Lgreen, ♀494, Wht-Red/M, ♀606 BPrk-wht/Wht-BPrk.

2 March

Start watch here 1610. 1705, I actually see a dominance interaction between ♀494 + ♀496. As always, ♀494 was dominant, pecking at the head of ♀496 2-3 times. The two birds were perched in the top stub of the 2° VO. ♀496 had been there originally, ♀494 approached. ♂473, ♂521 both seen very well as well, but I'm afraid ♀606 is missing. Seems like I should have seen her. 1715, ♀496 tussles with ² sapsuckers in the locusts by the bunkhouse. One of the sapsuckers seemed to be chasing the other one as well. End 1720.

8 March

Big commotion here at 0800. Lots of urks, wakas, I walk out to find a big chase going on involving one (or more) School Hill ♀♀. The only intruder I saw was ♀602 Blk/wht, being chased by ♀494 for sure. Ends quickly, as intruders fly off toward Y. I see ♀496 (although she gave me a scare not showing up for awhile), ♂521, ♂473. ♀606 must certainly be gone. End 0830.

18 March

I clean out the old nest hole, put in some wood chips, after seeing a bird working in the hole.

24 March

A quick watch, 0900-1000. ♂473, ♂521, ♀494, ♀496 all here.

28 March

A paranoid watch here. Complete census. Don't look like they're ready to breed yet, although birds checking out the cabin Blue Oak Hole. Sapsucking from top of trees on Adobe Hill.

1981

R.L. Mumme

2

Melanerpes formicivorusPlaque

2 April Start watch 1500. 2 birds in the sap tree on Adobe Hill, and an Orange-crowned warbler sapsucking. Doesn't look like these guys will be nesting soon. ♂476 was alone in the sap tree for quite some time, with ♂521 in the granary, and one or both ♀♀ off toward Buckeye. ♂476 would certainly be more concerned if they were about to nest. I'll watch here again in a couple days.

5 April Watching from Adobe Hill 0715. Birds in ^{Big} Blue Oak, saw a ♂ giving mild chase to another bird. I then saw the "intruder" fly in one step all the way to School Hill Field, 0820, a ♀NB intruder lurking about. Once again, ♂476 showing no interest in ♀494. ♂ was in the sap tree alone once, ♀ off elsewhere. Nobody seen in holes or at holes, but lots of activity at the Cabin Blue Oak and Big Blue Oak. End 0850.

9 April Watching here 1615. Wow, at 1650, a copulation! ♀496 was alone in the 2° tree, and ~~♂476~~ the 3 others were in the granary. ♂473 flew to ♀496, she briefly mounted him, then he solidly mounted her for 4-5 seconds, tail twist, good cloacal contact. This occurred on their favorite fornicatorium horizontal branch in the 2° granary (N side of tree, $\frac{3}{5}$ up). While ♂473 was copulating with ♀496, ♂521 flew over, and gave his (dominant) father a small peck. At the same time, ♂473 dismounted, and the birds flew off. Not unlike last year, even though ♂521 fathered ♀496's only offspring. Also some evidence of ♀ following by ♂473 so I'll watch again tomorrow.

Melanerpes formicivorusPlaque

12 April Start 0700. Doesn't look like nesting yet, though ♂521, ♀494, + ♂496 did visit the hole while I was watching. ♂473 moved away from ♀494 a couple of times while I was watching. At 0805, ♂521 + ♀494 were in the nest tree + ♂473 + ♀496 were around the garage trees, when ♀496 flew back to the nest tree, open wing waked, with ♂473 right behind. He (♂473) crouched + tail raised next to ♀494, she moved toward him, then ♂521 flew down to join the pair. Looked a bit tense, but nothing happened. End 0900.

13 April checked nest at 0615, empty, after seeing 2 birds in or at the hole at 0605. In light of Byron's observation yesterday of a ♀ woodpecker carrying a piece of white eggshell in the nest tree, I thought I'd better watch here some

Start watching nest hole from hide, 0630.

0820 ♀496 looks in briefly, flies off. 0835, ♂521 takes a peek as well. End 900. False alarm I guess, as no eggs laid yet. It did look like some following was going on, so I'll watch this PM.

0906, ♀496 in hole very briefly (20 sec)

Nest checked 0915. Empty.

Start watch from behind labs 1430. Well, I don't think they have a nest ~~yet~~ in their immediate future. ♂473 wasn't terribly concerned about ♀494's whereabouts, but he did follow her on one occasion. One long trip over Adobe Hill gives cause for concern as well. End 1530

1981

R.L. Mumme

4

Melanerpes formicivorusPlaque

14 April

Watching here 0710. Uh oh, another long trip up over Adobe Hill by I think ♂473 following ♀494, what's more, I walk over ^{to} ~~the~~ the Buckeye canyon hole tree and flush a bird out. Don't know who it was, but it looked like it flew back to Plaque by itself. These guys need more watching.

about
0745

1320, I walk back to the Buckeye canyon hole, and I am greeted by the sight of a ♀ woodpecker looking out. Oh, woe is me!

1430, Not good at all. I peep in, find a single fresh egg. Almost certainly laid this morning. Measured (26.3 x 19.1 mm), marked #1, and returned. Set up blind, and start watch. End 1500, M. Peacocks.

Start watching near cabin 1750. 1803, 3 birds in 2° tree, ♀496 flies in from cabin BO, pre cop, ♂473 flies over, she mounts, he then makes weak attempt to mount her, but doesn't.

1808 All 4 birds fly down toward Y area. Very interesting both ♂473 + ♂521 are following ♀494. ♀496 is following them! I get the distinct impression that ♀496 is simply not ready to lay eggs yet, and that ♀494 is the only "receptive" ♀.

1810, all 4 have flown to the Y, don't return. ♂521 + ♀496 may have drifted back here early, but I saw very little at roosting. One bird may have been scared out of roosting in the nest hole by Byron (see his notes).

14 April 1981

1750 ♂473 ♀494 ♂521 | 2^o tree
1755 " " " | cabin blue oak
1800 all 4 cabin blue oak | NI
1805 all 4 2^o tree | I
1810 all 4 Y area | I
1815 nobody | all toward Y
1820 " " "
1825 " "
1830 " "
1835 " "
1840 " "
1845 " "

both follow ♀494 |||

both FAF ♀494 |||

♀496 follows |||
other 3

both ♂ follows, ♂521 lags |||
unknown 1

Melanerpes formicivorusPlaque

(14 April) More clearly, two birds returned to the granary furtively about 1850. One was ♂, the other ♀, and I suspect ♂521 + ♀496. They returned independently, the ♂ first. Much later ~~saw~~ (1910) saw 2 birds in the 2^o tree, but no roosting or anything.

Melanerpes formicivorusPlaque15 April

Start 0650 0735, ♂521 drumming up at cabin utility pole. 0750, ♀496 takes a look into the 1980 nest hole. 0803, 3 birds fly up over adobe hill. I think it was ♂521 first, the ♀494 (1 min later), then ♂473 on a much delayed follow. 0805, ♂473, ♀494, ♂521 fly back.

0825 Stopping here for a while. My guess is that the Buckeye canyon nest was a "dump" or "practice" nest, and has already been abandoned. Of course, I'll have to check with Walter on that to be certain.

0900 -- Whoops. Relieving Walter. ♀494 did indeed lay an egg here at around 0630. End 1009 Walter arrives with the news that an egg (presumably laid by ♀496) showed up in the 2° tree hole.

1245 Relieving Byron at 2° nest (with ♀496 eggs).

1400 -- Nothing happened, relieved by Mary.

1600 -- Starting watching for behavior. Very dull & a break to look for Byron. at 1815, the birds fly up to Watertank Hill, & I am able to see all 4 of them moving around in the live oaks there until about 1845, when I lose them. Nothing seen at roosting. A pair of birds came into the 2° granary briefly, and some harrits at Adobe Hill, but that was all.

0545

16 April

Start watch at 2° granary hole (1 egg, by ♀496) in the nest

0623 ♂521 looks in (5 sec).

0701 " " " "

15 April 1981

0700 ♂473 ♀496 + g | ♂521 ♀494 + 2° NI
0705 " " " " NI
0710 " " " " NI
0715 all but ♀496 2° + | ♀496 cabin
0720 all 4 2° tree
0725 ♂473 1° tree | others 2° + rest
0730 ♂521 cabin | ♀496 2° | ♂473 1°
0735 ♂♂ ♀494 cabin | ♀496
0740 all 4 1° tree |
0745 " " " | NI
0750 ?
0755
0800
0805 ♂♂ ♀494 @ ♀496 (all 4) 1°
0810 all 4 2° | I
0815 ?
0820 all 4 1° |
0825 all 4 1° | I

♂521 flies away from both ♀♀

||

♂473 FTF ♀496 |

♂473 follows ♀494 : 1 (late)
FTF 1 (very late follow)

♂521 FTF ♀494 |

15 April 1981

1600 all 4 2° tree |
1605 " " " " NI
1610 ?
1615 ♀494 2° | ♂473 ♂521 ♀496 1°
1620 all 4 2° |
1625 ?
1630 nobody around.
1635 "
1640 "
1645 "
1650 all 4 1°
:
1750 nobody
1755 all 4 1° |

both ♂♂ follow ♀494 ||

" " FTF ♀496 |

16 April 1981

1705 nobody
1710
1740 all 4 2°
1745 " " " NI
1750 all 4 cabin
1755 "core 3" cabin | ♀496 g 1°
1800 "core 3" adobe | ♀496 1° g I
1815 ♀496 2° | rest on adobe
1820 "
1825 ♀496 alone 2° | others madrone
1830 ♀496 alone adobe | others madrone canyon

both ♂♂ follow ♀494 |||

both FAF ♀496 ||

both FTF ♀496 ||

♂521 FAF ♀494 |

♂473 follows alone |

♂473 FAF ♀496 ||

♂473 2 long trips back &
forth from madrone canyon

Melanerpes formicivorusPlaque

(16 April) 0712 ♀494 looks in briefly, flies off

0752 ♂521, then ♀494, ^{at} ~~nest~~ nest, look in a few seconds each, fly off

0754 ♀494 at hole nearly 1 min, then ^{flies off} ~~flies off~~, ~~flies off~~

0755 ♂521, then ♀494 enter hole. 0758, ♂521

looks out for 1 sec, twice.

0805 ♀496 comes to hole, ♂521 leaves, ♀494 leaves, I scare off ♀496, check nest. A new egg, marked #2, laid by ♀494. Measurements were 25.3 x 19.4 mm. Egg still warm.

0826 ♂521 looks in

0927 ♀496 enters, leaves 0928. ♂521 checks hole briefly then enters. ♂521 leaves at 0932, after tapping on inside of hole

0934 ♂473 looks in, flies. ♀496 enters looks out quickly, 0935. 0936, ♀494 goes to hole, ♀496 leaves, ♀494 enters at 0937 0938, ♂473 goes to hole, ♀494, ♂473 fly off 0945 nest check. Still 2 eggs. End watch at 1015.

→ Watching behavior in the afternoon, summarized on back of page 6. Again, both ♂♂ appear to be following ~~the~~ ♀494, ignoring ♀496. Late, the 2 ♂♂ + ♀494 were $\frac{1}{2}$ mile up madrone canyon, with ♀496 alone in the granary, the cabin Blue Oak and Adobe Hill. Twice, however, ♂473 made very long flights back to the granary area,

Melanerpes formicivorusPlaque

(16 April) remained (with ♀496 in the area) < 1 min, then flew way up Madrone canyon again (at least $\frac{1}{2}$ km or so). About 1840, the 3 birds returned in a tight pack from madrone canyon, and after stopping in the lab trees briefly, appeared to head off toward "the Y." ♀496 remained alone in the granary area. However, right at about 1900, a ♂ flew into the top of the Plaque tree, was quickly mounted by ♀496, then fully copulated with ♀496. It was too dark to see bands, but the ♂ had a "red point" going into his white forehead on his left side. Will have to see who that is. Suspect that it is ♂473, despite last year's electrophoretic data showing ♀496's nestling was sired by ♂521.

17 April 0615. Nest checked in 2^o tree. Still eggs #1 + #2.
 0815 ♂521 enters 0820 ♀494 enters; both leave 0822.
 Nest checked. Still eggs #1 + #2. 0950 ♀494 approaches ♂521 at hole, ♀494 gives precop tail raise. both leave without entering. 0952. ♂473 enters. 0955 ♀496 enters ♂473 leaves (?). 0956 enters, ♀494. 1000, ♀496 leaves with wood chip, ♀494 follows. 1001, ♂521 enters.
 Nest checked. new egg, ^{#3} 24.5 x 19.1. Probably ♀494, but not certain since both ♀♀ were in. Since ♀496 flew out with a wood chip. End 1020.

Later in the afternoon, Walter finds nest empty! Entirely cleaned out, ready for remest. Suspect ♀496. These guys just did not have their act together ^{this} time.

1981

R. L. Mumme

9

Melanerpes formicivorusPlaque19 April

Walked up to the Buckeye canyon hole at 1630, pulled out the two eggs that were still there (For use in egg-toss experiments). At about 1530, while up at the cabin, I saw Plaque birds going in + out of the hole in the 2° tree. Definitely interested, and since Buckeye canyon hole wasn't cleaned out yet, it looks good for the 2° tree hole. Interesting to see how long it takes these guys to re-nest.

Watching 1700. Walter + Byron just checked hole, no eggs.

1710, ♀494 + another bird in the Plaque tree scaling moss off the branches. One trip up ^{past} Adobe Hill worried me, but I walked back to the canyon hole area and saw no birds. End 1730.

21 April

Watching back in the Buckeye canyon area at 1500. ♂473, ♂521, ♀496 back here. 1530. FUCK! ♀496 enters the

upper hole of the 2 canyon holes. I fear we have already Blown it here -- AGAIN! Will have to open it pronto. Incidentally, while here at 1515, saw a nice prolonged copulation between ♂473 + ♀496. On a horizontal branch of a Blue Oak. Good tail twist underneath the ♀, good cloacal contact. ♂521, nearby, flew over + gave ♂473 a gentle peck near the end of the copulation. Concurrent with the peck, ♂473 + ♀496 flew apart. End 1540. Going to get gear to check hole.

Hole finally opened at 1700. 2 goddamn eggs, very different in size. Probably laid today.

① 25.7 x 19.5 (♀494?)

② 27.1 x 18.5 (♀496?)

That's the way it goes. Also stayed with these guys

1981

R. C. Mumme

10

Melanerpes formicivorusPlague

(21 April) through roosting. Roosting was rather strange. A lot of single birds flying around, no mountings or "pairs" or "trios" seen. One bird roosted late in the utility pole near the Plague tree. While waiting for roosting, I searched the Branch of the 2^o tree where Byron found the egg 10 days ago, But I saw nothing that looked like egg remains.

22 April Start 0630. ~~With~~ watching nest hole in Buckeye canyon from top of Adobe Hill.

0830 Nothing has happened. 2 birds flycatching about the summit of Adobe, but nobody's gone near the canyon holes. Now watching 1^o area from W side of Adobe.

0900, the birds (of course) fly over to the Buckeye canyon area. I go back there, lots of birds milling around. ♂521 looked in the nest hole a very long time (10-15 minutes) but never entered. Finally, at 0930, I see a bird leave the hole, and a ♀ enter. Never knew when first bird entered. They definitely seemed bothered by the hole being opened.

1000, I go to check hole, flushing a bird out. Beggs now, the new one marked #3 + returned. Probably the work of correct! →
checked 24 April
♀494: 25.3 x 19.1 (I should remeasure length. Not sure I remember it correctly). Anyway, is ♀496 taking the day off, or was she freaked out enough to lay in the 2^o tree? Actually, I think she was the bird I flushed when I went to check the nest. Since ♂473 was not around, ~~was~~ I doubt it was ♀494. End 1030. Checked 2^o tree hole 1700 hrs. Empty + wet!

23 April Nest check 1100: 2 new eggs, marked #4 + #5. Unfortunately, I forgot to bring the calipers, so I'll have to measure the

1981

R.L. Mammé

11

Melanerpes formicivorusPlaque

23 April new arrivals (plus #3) tomorrow. Egg #5 looked like the work of ♀494, and egg #5 was pretty small, although not approaching runtiness. ~~runtness~~

Watching near the cabin, 1700. 1745, ♂622 ^{Blk/O-Blk}

of 1500 intrudes here, chased by ♂521

24 April Nest check at 1540, No new eggs(!). But a ♀, I think ♀496, in the hole as I arrived. Will somebody lay tomorrow? Measurements of eggs #4 & #5:

④ 496? 24.3 x 17.5 failed to hatch

⑤ 494 25.6 x 19.3 failed to hatch

25 April Nope. Nestcheck at 1540, No new eggs. Clutch complete at 5 eggs, the winpiest 2 ♀ nest on record.

29 April Nestcheck 1230. Still 5 eggs, Introduce a plaster egg to the nest.

1 May Nestcheck 1830. 5 eggs, plus plaster egg. Fake egg not removed after 48 hours. Die introduced into nest

4 May Nestcheck 1200. Hatching: 3 Babies, from eggs 1, 2 & 3. Shells of all 3 eggs still in nest, so I would say All 3 hatched today, 4 May Eggs ④ & ⑤ still unhatched. Also, die was still there: Not removed within 48 hours.

9 May Nestcheck ~~at~~ 1630. 3 babies, eggs ④ & ⑤ still present: Did not hatch. But it looks like embryos are at least partially developed: Babies banded & weighed:

① BPrk - Wht (N) 25.3 g

③ 20.0 g (not banded)

② Or - Brown 20.8 g

10

23 April

1700

1705

1710 ♂473 ♀494 g |

1715 " | NI

1720 "

1725 " | NI

1730 all 4 g area |

1735 ?

♂521 FTF ♀496 |

Melanerpes formicivorusPlaque(9 May)

Broke open egg #5, and found an almost completely developed embryo. Can't understand offhand why it failed to hatch after making it so far. Egg #4 seems to have suffered the same fate.

27 May

Banded babies (3) with Walter yesterday

4 June

I boob here at 1345. I walk up here to see if the babies have fledged. Lots of adults around, no sign of fledglings, etc. What's more, no babies looking out of the nest or making any noise. ~~With~~ With horrible thoughts of last year's failure in mind, I make the mistake of climbing up to the nest, where I find 2 babies still in the nest, 661 + 662.

They weren't in the nest long, however, and I had to run around on the ground to get them back, and slowly and carefully put them back in the nest hole. They could fly but not with a lot of gusto. J660 must have already fledged. Do not ever do that again, Ron! Could have been a real disaster.

1430, I spot J660 ^{DBlue-wht (N)/M} ~~DBlue~~ / , fledged, associating with adults in Blue Oak behind (uphill) from the nest

1500, Still nobody has fed the babies in the nest. Hope they'll be OK. I'll check again tomorrow. (I did it)

8 June

walking past at 0630, I see 3 of the Plaque adults jumping all over a Nuttall's woodpecker in the Plaque tree. All 3 birds were pounding on the Nuttall's continuously, for about 20 seconds, forcing him to the ground several times. Finally he wound up dazed in front of the chicken coop. I walked over and he flew off weakly toward the upper barn.

1981

R. L. Mumme

13

Melanerpes formicivorusPlaque

(8 June)

walking by 1110, I see babies! J662 DBlue-Red / DBlue-Red
and J660 DBlue-white both in the Plaque tree. J662
not looking any worse for wear from my little faux paus
Both flying quite well. I suspect 661 is around as well.

1120, well, first Juvenile dominance interactions of
DBlue-white (w) / m

→ the season. Top of the 2° tree, J660
pecks the keepees out of J662, at least 2 independent
times. Happened after I saw a ♂ fly in and feed 662.
J661 -Blk - DBlue / LBlue also seen. All 3 babies,
all 4 adults present.

10 June

Watching here 0720. 0800, I see dominance. J661, J662
together on a small storage limb, no adult present, J661
→ pecks hard at the head of J662 3 separate times!

→ 0900, watching birds in Big Blue Oak, ♂521 kleptoparasitizes
a ♀ Bluebird. ♀ W. Bluebird had caught this enormous spider,
literally the size of the bluebirds head. Very fat as well.

She handled it for 15-20 seconds, then ♂521 flew down
and the Bluebird flew away without resistance. ♂521 picked up
the rest of the spider and flew up higher in the tree to feed J662

0930. More Juv. Dom in 2° Tree. 661 nips 662

→ very hard around the head several times, 2 separate occasions,
Birds alone in 2° tree. No adults near. 1020, another
J661 > J662. Former lunges at J662, who turns head, closes
eyes, while ♂521 present and feeding J661.

14 June

Up in the cabin at 1050 working on the egg-tossing paper
I am distracted by ♂521 poking around in a globular
paper wasp nest hanging from the lower crossbar of the utility

660 > 662 //
661 > 662 HHH 1

~~660 > 661~~

661 > 660 // (14 June)

Melanerpes formicivorusPlaque

(14 June) pole in front of the cabin. Several times (at least 5) • I watch him probe into the wasp nest, pull out larvae (very white) and feed them to J661 in the Blue Oak or on the utility pole. Neat. 1130, Lucky, indeed. J660 + J661 show upon the utility pole, and after following them down to the secondary tree, I see dominance! ♂521 had been feeding J660, and had just left. J661 flew over and gave J660 a pair of gentle pecks to the head. He
→ J661 repeated a few seconds later, forcing J660 to the bottom of the branch. This is interesting, since I know J660 fledged first (see 4 June notes). Will be interesting to find out the sex of these guys.

2 July Both J660 + J661 at Y at 0700, being chased around by School Hill birds. (see SHill notes)

31 July With Frank + Walter under the Plaque tree, 1500, I spot both Juv's being fed by ♂521 in a small storage limb above me. Using Frank's binos, I see J661 peck hard at J660 3 separate times. J661 clearly dominated! What's more J661 appears to have molted into ♀ plumage, while J660 looks like a ♂! Neat! A ♀ dominating her brother.

3 Aug A quick look here 0730, confirm J661 in ♀ plumage, and J660 ♂. Both have very white eyes now. ♂473 too

4 Aug Another quick look, ♀♀494 + 496, ♂521, J660, all present.

29 Aug 0700. Lots of commotion (intruders, chases, garricks waka rallies, etc. A quick look at the birds on the utility pole near the cabin produces ♀494, ♂♂521, 473, ♀J661.

dom	juv		
	6601	660	662
6601	—	2	6
660	—	—	2
662	—	—	—

Melanerpes formicivorusPlaque

30 Sept Storing has begun here! About 50 new acorns in the Plaque tree

20 Nov A quick watch here: Complete census: ♂¹⁶⁰⁰473, ♂521, ♀494, ♀496 ♂660 all seen. ♀661 must certainly be gone. I missed her when I watched here on 7 Nov.

10 Dec Counted stores, 1500 / Plaque tree: 1625
 / Utility pole (quees, acorns in roost holes) 200
 / 2° tree: 375
 ♀ TOTAL 2200

♀494 and ♂660, ♀496

Melanerpes formicivorusY

3 June Walking past at 1800, I actually see two birds fighting in the dead locust granary by the door to the lower barn. Upon closer examination, the participants turn out to be ♂521 from Plaque and I believe ♀523 (!) from Low Hill - School Hill. Anyway, I think 3 birds here from School Hill, as I later see ♀523, ♂402, plus another "friendly" that I never got a good look at.

2 July School Hill + Plaque birds here at 0700.

3 Aug 0800 SHill (J669 ^{or-DBlue/unt}) ad Plaque (♀494) here in the Lower Barn Locusts. A bit of chasing going on as well.

11 Sept Birds here! Not just Plaque + SHill, but a lot of NB, and according to Walter, they've been hanging out here at least the last 3 days. Right at the Y at 1500hrs I find J♂660 ^{DBlue-unt(N)/m}, then 3 NB, 1 ♂, 1 ♀, and one that appeared to be molting into ♀ plumage. The latter 3 I all saw in the vicinity of the yellow pan trap near the fence corner.

1520, 5 Plaque birds, ♂521, ♀♀494, 496, J♂660 and J♀661 all seen in the Lower Barn locusts. Look very "comfortable" there, not being challenged. I wonder what "granary" the intruders here perceive.

1630, The plot thickens. I get a good count of 5 birds in the vicinity of the Y sycamore, including J♂669 ^{or-DBlue/white} of School Hill, at least 1 (and I think 2) ♂NB, 1 ♀NB, and I think that bird molting into ♀ plumage. Everybody looked like they might be juveniles. Lots of tail spots.

Melanerpes formicivorusY

(11 Sept) Anyway, this is very bizarre. I saw a rather vicious dominance interaction when ♂669 pecked hard at a ♂Juv NB. I saw another interaction that I think involved 2 ♂NB. What's more, ♂669 and a ♂NB were working on an excavation of some kind in the Y Sycamore (in a dead stub, facing down the lane, "Davis" side of the tree

End 1700; This will take a lot more figuring out.

Catching + banding some of these guys wouldn't hurt

12 Sept Passing by 0800, I find Plaque Juv ♂660 in the Blom Knoll roost hole tree, eating an acorn. 0830, for added confusion, I find 2 Buckeye juvs, J♂663^{M/D6n-BPnK(N)} and J♂665^{Yellow-Bk/Red Metal/Yellow Black} in the Big Valley Oak that overhangs the Blomquist cattle pond. Very strange. Undoubtedly, there are a lot of acorns here. I also saw J660 of Plaque in the tree, too.

1250, for good measure I find Skill juvenile ♂668^{BK-Grr/M} in the knoll area

14 Sept A pass here, 0700-0730. Plaque birds J660 + 661 + ♀894 + ♂521 appear to be defending the lower barn locusts, although they are being challenged by intruders. Hazing around the cattle pond I find Buckeyes J663 + 665. SOS as 12 Sept. Also, J676 of 1500 was here at the cattle pond briefly, but I believe he returned to 1500.

20 Sept 0715 -- Sunovagun, a POWER STRUGGLE! Very bizarre, in that the main action is occurring on Blom Knoll, not in the Lower Barn Locusts. 0800 Geeze, what a mess! Birds seen here are: 2 ♀ NB; J♂660 (Plaque); J♂669 (Skill) with

Melanerpes formicivorus

Y

(20 Sept) probably J668 as well: ♂ J702 ^{Or-Pu/Or} from Warp 5, (!)
 of all places; J ♂ 695 ^{m / mauve} or 1800; J ♂ 665
^{Yellow-Blk/Red} of Buckeye, and I believe J666 Blk-Red/m
 of Buckeye of Buckeye as well. Plus peripherally, ♂ 402,
 and Plaque adults (Barn).

0810 Coop (or sharpie) alarm calls go out

0900, well starting to get the picture. The main activity
 is centered around the old fallen granary, although there is little
 activity in it per se. Most of the birds are in a Blue oak
 20 m north and in the big, acorn loaded VO near the fence line
 30 m SW of the granary " " main participants are!

① School Hills ~~10~~ J668 + J669, mostly the latter doing the
 chasing. ♂ 402 is here, but doesn't look that active.

② An ad ♀ NB, plus a Juv that looks like she's molting
 into ♀ plumage (see last week's Y notes) that appear
 to be cooperating, or at least not chasing each other.
 The adult ♀ NB seems to be chasing another ♀ NB

Others: J ♂ 702 (Warp 5), J ♂ 695 (1800), J ♂ 665 (Buckeye)
 (J666 not confirmed), J660 (Plaque), J ♂ NB.

And, the three ♀ NB. Meaning today, at
 least 11 active participants; A cooperating group of 2 (or 3)
 S Hill ♂♂, and an apparent cooperating group of 2 ♀ NB
 End 0910.

1330, Activity shifted to the pine trees by the School House
 (????). Still, the 2 school Hill Jurs (with ♂ 402 nearby)
 and 1-2 ♀ NB chasing everybody. Most intruders look like ♀ NB.

Intruder here, ^{Or/m} Or/white (who?). Thought ♂ 537, but no.

Melanerpes FormicivorusY

(20 Sept) No, stupid, its ♂473 from Plaque, proving once again that I can't tell the difference between Lgreen & Orange.

Anyway, he's near the School House at 1400.

21 Sept watching here 0830. Lots of new developments. First, two foci of activity: At the Y per se, hanging around the Y Sycamore, the old VO granary ("Y Not") are 3 birds, a ♀NB, a ♂NB and J668 of SHill, who I Original thought was a ♂, but I now have some doubts. They look modestly interested in the old VO granary, but more so in all the acorn laden trees there. J669 would fly by occasionally as well. Most of the noise was from the knoll, though, and I wondered why the SHill juvies, who seemed in control yesterday, were now off to the side. I found a likely answer over on the knoll: More Buckeye Birds! ♂619 Lbrn/yellow J666, Blk-Red/M, and J664 ^{White/Dbrn-Lbrn}. Didn't see J665, who was here yesterday, and J663, here a few days ago, but they might be around. J♂660 (Plaque) and J702 (warp 5) here too, plus a ♀NB. Hard to tell what will eventually happen here. Maybe nothing. Very quiet by 1030. End watch.

30 Sept 0830, trying to catch up here after a week in Berkeley. Looks like little has changed. Lots of birds here. Main points: (1) Plaque birds are still in control of the Lower Barn Locusts (♂521, ♀♀494, 496 seen there), but they now seem to be being challenged a bit. A ♀NB, and perhaps J666 Blk-Red/M(?) of Buckeye being shagged out of the locusts. (2) At least some birds, 2 NB and J669 from SHill are still lurking about in the two Y sycamores, the School House pines, etc. However

Melanerpes formicivorus

(Y)

(30 Sept) today I didn't see any sign of interest in the ~~Blom~~ ~~House~~ Valley Oak granary near there. Don't know what they'll do, if they stay! (3) Still action on the Blomquist knoll as well. At 1530, I find ♂564 Red-BK/BK-Red and J♂695 Mauve/Mauve at 1800 in the knoll area (first record of ♂564 here: ♂561 was at 1800 today (see 1800)) I also saw J664 ^{wht/Dbrn-Lgreen} of Burkeye in the knoll area, plus a ♀NB checking out the knoll roost hole.

30 Oct Things still confusing here. (1) Around the "Y" Sensu stricto, I find at ~~1400~~ 1400 J♂669 ^{Or-DBlue/whr} then in the Blom corner utility pole I see J668 ^{BK-Green/m} ^{waiting} with that ♀NB that's molting into ♀Plumage, plus another NB that I think was ♀, but was not at all sure. What's more, I'm starting to think that J668 is molting into ♀plumage! J669 is definitely ♂, however.

(2) Plague still "owns" the lower barn locusts: ♂521 ^{DBlue-wht(N)/m} m/yellow-BK and J♂660 seen in the granary, 1430-1445.

1530, well, it's in doubt. A big scrap developed over the locusts. J668+669, with the 2 ♀NB started investigating the locusts while the Plague birds were away. The 4 looked very interested in the storage holes. Anyway, after a while the Plague birds returned, and after about a 10-min animated struggle, the 4 "intruders" were vanquished to the corner utility pole, the big live oak there, etc. ♀494 was especially hopped up in all the fighting, but ♀496, ♂521, J660 all there as well. Anyway, I take that as an encouraging sign for the newcomers. First time I've seen any of the birds here show any interest in the true granary.

Melanerpes formicivorusY

(3 Oct) Also, one would think Plaque would eventually give up on this little "side project" and get back to their own territory + store acorns. 1555, another scrap in the locusts, the 2 cooperating ♀ NB and ♂ 669 all there. This could develop into a real power struggle. Plaque has started storing, its worth noting. Also seen on the Knoll was J 664 Lbrn-DBr/M of Buckeye, M who I've still not been able to sex, and ♂ 564 Red-Blk/Blk-Red of 1800. 1610, still a lot of action in the locusts, including garricks. Plaque birds still in control. Will check later. At least action is at the right spot, now.

7 Oct Watching 1310. Hallelujah! A resolution in sight. As I suspected from a watch at Plaque yesterday (and a glance here while collecting bugs), Plaque has apparently given up on the Lower Barn Locusts and has returned home to store acorns. Here now, looking in control and comfortable with each other, are J ♂ 669 ^{Or-DBlue/white} M / Or-DBlue, and the 2 ♀ NB. Great! ^{Blk-brn/M} Looks like they have it. 1330, also here is J 668 Blk-brn/Blk, and I am 95% certain that J 668 is molting into ♀ plumage. Very strange! I even saw J ♀ 668 exchange quick mounts with one of the ♀ NB (!!), so they thus far seem quite friendly. Whether ♀ 668 will stay or not is not clear. Also, her breeding status if she stays would certainly be interesting.

Doesn't look like they are storing acorns yet, but I feel pretty sure that they will.

1440, Checking the Knoll, as I thought that I saw/heard a bit of activity here. All I find are 1 or 2 ♀ NB, and despite my suspicions, there is no compelling reason to think that

Melanerpes formicivorus

(Y)

7 Oct these ♀♀ are not the "resident" ♀♀ here. So it looks like these 4 birds are all alone here: we have a new group! Not bad at all.

Also found a couple of new holes on the knoll. One old opened one is in a vertical dead stub in a Blue Oak 25 meters W of the "roost hole" tree (hole faces north). The second is in the torn, sheared off face of the broken Blue Oak 20 meters ENE of the roost hole tree. Good to know, as the two ♀♀ are worth ambushing here, soon. End 1445.

**

GROUP UPDATE:

① J♀668 and J♂669 found Y as 1st year birds, 5 Oct 1981: Action at the Y first began about 10 Sept, ♂669 first seen there 11 Sept, J♀668 20 Sept (but was probably around earlier). By 20 Sept, and especially 3 Oct, it was becoming apparent that these 2 birds were beginning to form a coalition of sorts with 2 ♀NBs. However, the first hint that they might wrest control of the locusts from Plague did not come until 3 Oct, and by 7 Oct they seemed secure, so I say that Y was founded 5 Oct, even though all the founders were present at least 2 weeks earlier.

② 2 ♀NBs, 854 and 855 found Y 5 Oct 1981.

The same things apply for these to ♀♀, as they were presumably present from mid-september on.

**

→ It's certainly worth noting that the acorn crop around the Y was phenomenally heavy. Several Valley, Blue, and Live Oaks had excellent acorn years.

Melanerpes formicivorusY

15 Oct A quick stop here reveals ♂402 ^{yellow / DPink} " / " , along with ♂669, ♀668, and two ♀NB. Is ♂402 going to move here, too?

17 Oct A failed ambushed attempt here, in the "easy" hole in the S Hill ravine. Unfortunately, I missed the fact that the stub above the hole was directly connected to the cavity. Bummer. I pulled the string at about 2000 hrs on 16 Oct, and I may have heard a bird fly out then. Oh, well.

Lots of action on the Knoll again, at 1600 hrs. I find lots of 1800 birds (♂564 Red-BK / BK-Red, Yellow-BK / M, ♂561 Yellow / Black, and ♀695 M / Mauve, M / Mauve), two 1500 birds (♀601 [P.P.P.] Lbrn / Yellow, M / Wht-Lbrn, ♀676 DBLue-Wht / BK-Wht, Wht-DBLue / M), 2 Buckeye birds (♂663 M / DBrn BPrk (IV), ♀ (finally!) 664 Wht / DBrn-Lbrn, Lbrn-DBrn / M).

Don't know what it was all about, but the 4 Y regulars (♀668, ♂669, a ♀NB, and a fourth bird [♀NB or ♂402?]) were still in charge of the locusts in the lower barn. Will have to check here tomorrow.

19 Oct Once again, lots of commotion at the Y. 0800. In the lower barn locusts, secure are ♂402 (! here again), ♂669, ♀668, and 2 ♀NB although a 3rd ♀NB appears to be here as well, getting chased.

Lots of action on the knoll, too. Lots of birds going to the yellow pans, so I try putting the "corner" pan inside one of Bill's Potter Traps (a Yellow-Pan-Trap Trap?).

Melanerpes formicivorus

Y

(19 Oct) no takers in $1\frac{1}{2}$ hr, 0900-1030, but the birds show some interest. I may try some more.

Anyway, a lot of 1800 birds on the knoll. ♂561, ♂564 anyway, plus ♀NBs.

Again here at 1630. ♂562 war-barn/m here too, so a large 1800 contingent ♀695 and ♀696 also here, and I got the fleeting impression that ♀696 might actually be ♀, too. All ~~1800~~ 1800 helpers here, except ♀565.

Where might she be? Also here are ♀NB, and ♀664 from Buckeye on the knoll.

28 Oct Watching 1210. The usual gang in the Lower Barn locusts, ♀668, ♂669, 2 ♀NB. Plus ♂402 was visiting here again, but at 1215 I saw him (presumably) make 1 continuous flight from the locusts to School Hill. Storing is in progress! Saw each of the 2 ♀NB store an agrifolia acorn (gathered from the corner live oak)

1330, The knoll is still in contention. ♂564 and ♀695 of 1800, a ♀NB (perhaps 2) and ♀664 of Buckeye all hanging out here (the ♀NB is not the same as the 2 resident ♀NB). Anyway, they (especially the ♀NB) seem to be defending the knoll area from the Y residents. The small but acorn-laden Valley Oak nearest the corner is particularly contested. End 1340. The knoll birds (♂564, ♀NB) in control of the knoll roost tree, as well

20 Nov Just when I think all the confusion at the Y is over, I find out otherwise. Watching here 0930-1130 I find
① All 4 "usuals" in the lower barn locusts, ♀668, ♂669

Melanerpes formicivorusY

(20 Nov) And the 2 ♀NB. What's more, ♂402 was here from 0930-1000, storing acorns! However, at 1015 or so I saw a bird make a continuous flight from the locusts to School Hill Field, and when I watched the locusts again, ♂402 was absent while the other 4 birds were still actively storing acorns. Many acorns are now very visible in the granary, ^{most acorns harvested from the} big corner live oak.

Meanwhile, on the knoll, we have ♂564 of 1800, along with two unbanded ♀♀, most certainly separate from the Y birds. In fact, there are two stored acorns in the fallen tree on the knoll, and I saw these 3 birds poking around with acorns at several other spots on the knoll. Also, ♂564, ^{and} at least one of the UB ♀'s were excavating a hole just below the east-facing blue oak hole on the knoll. Could we have a new group forming up here? If so, the temptation to call them the "knoll set" might be irresistible. I'll have to keep an eye on things here.

23 Nov ♀695 ^{M/Mauve} back with ♂564 and the 2 ♀NB in the knoll area, 0930. At 1100, after seeing ♂402 at School Hill (Storing acorns), I find him back at Y, storing acorns! ~~talk~~ about bet-hedging! see SHill notes for this date.

30 Nov The "knoll set" is still going strong: 0930, ♂564, ♀695, and (a new addition) ♂562 all hanging around the fence-line valley Oak, with at least one ♀NB. At 1000, they were harvesting acorns from the Y live oak loaded with acorns,

Melanerpes formicivorusY

(30 Nov) and carrying them to the nearby sycamore. Shortly thereafter, 5 birds (3 1800 birds 2 ♀NB?) flew up to the side of SHill, on the N rim of the roost hole canyon. I wish I knew what these guys were up to.

At the Y proper, I spot a ♀NB, and ♂402 (of course). Can't wait to see what he finally does.

9 Dec Running 2 18ft Mist nets, watching here 1100-1300. 4 Birds seen at Y: 2 ♀NB, ♀668 (back!) and ♂669. ♀668 stored 1-2 acorns, and looked quite comfortable here. The 4 birds seemed to be here constantly during the 4 hours I watched, even though ♂669 was on SHill yesterday. No sign of ♂402, and no mistnet success.

As for the "knoll set," there seemed to be a bit of activity up here early, but from 12-1 I heard not a peep from the knoll, nor did I see any birds.

15 Dec Running nets 0730, and watching. At the Y Proper I see ♂402 (storing an acorn!), ♂669, and 2 ♀NB. By 0820, still no sign of ♀668. As for the "knoll set," ♂564 and ♀NB, with at least 1 and perhaps two other birds around. Also, ♂660 ^{Blue-Whit (N)/M} of Plaque intruded at knoll set, and was shagged out by the "residents" (♂564 I think)

1

Melanerpes formicivorus

1500

Hastings Reservation

24 Jan Start 1310; ♂ 493 LBlue/LBlue in the granary as I arrive.

I'm going to try to sit without a blind, next to the creek. ♀623 Red/Yellow shows. 1345, Complete census.

♂ 297 Orange / yellow - D Green, ♂ 492 Or / BIK n / BIK, ♂ 622 M / or - BIK,
♀ 435 metal / yellow - white. Pretty quiet, actually end 1410

~~1390~~ ~~ma signa la spallata~~ ~~ma signa la spallata~~, ~~but~~
~~Atiphe~~ ~~with~~ ~~Blas~~ ~~is a~~ ~~holes~~, ~~pro~~ ~~oops!~~

7 March Start 1110 Complete census, ♀ 435 yellow-B/K / yellow wht

only one not seen well, everyone else see. Very well indeed

♀623, ♂622, ♂493, ♂492, ♂297. The good news

is that the old nest hole appears to be free of bees.

Coopers Hawk call, a few birds went to the hole, and
went in. Perhaps we ought to clean it out so

they'll nest there. Also saw ♂ 297 take a peek at a hole (or hole start) in the gray ^{low} horizontal line

that points toward the 2^o tree. Lots of flycatching today.
warm + sunny. End 1215.

4 April Start 1120, 1222, ♂ Kestrel captures skink(?) (slimy, lizard with lateral stripe, pounced from 1500 2° granary).

Given to ♀ kestrell, she eats it. ♂ got in a few pecks - Lizard
tail still writhing at 1235. End 1110. ♂297, ♀435, ~~♂492~~
♂492, ♂622, ♀623 all seen well + repeatedly. ♂493 is missing.

Certainly doesn't look like a nest will be immediately

forthcoming. ♂ 29) seemed u-concerned as to whereabouts of ♀.

♂ 29) looked once in the 1979 nest hole, and once in

the granary low limb holes. Nobody ever flew back
or forth to School Hill.

Melanerpes formicivorus1500Hastings Reservation11 April

I swing by here at 1400, and I find ♂297 and 2 other ♂♂ in the tree (Valley Oak) closest to the tree house tree. The other 2 males fly off, but ♂297 continues to work some food item for $\frac{1}{2}$ hour. When he moves it, I see that it's a ~~the~~ Sceloporus lizard! How about that! End 1425. Can't find anybody else, but since ♂297 is not near the ♀ and seems unconcerned about anything at the moment, I'd guess that nesting is not imminent.

25 April

Two weeks later, nesting is pretty darn imminent. At 1715 I flush a bird out of the low hole in the 2nd ~~granary~~ granary (1979 nest), and discover 1 egg (after going back to get the small stepladder). Egg marked #1 and returned. Presumably laid today. Will have to get ~~the~~ egg-laying behavior tomorrow.

26 April

Nest check 0930. A 2nd egg, laid this morning, marked #2 and returned.

Starting watch 0950 Good watch. ♂297 not following ♀435 in the least: Just what I'd hoped. ♀623 is also here, but not the 3 ♂♂ who have just moved to Blomone. ♂297 was in the nest hole for a few minutes. End 1215

27 April

Start 0655. Nobody around. 0720, ♀509 (6m-06m/Yellow from Gazebo, in the Blue Oak. Mildly supplanted by ♀435. ♂297 in granary, showed no response. 0755, ♀435 leaves nest, ^{tree} probably in nest laying. Other intruders seen here as well. End 0920.

1500 Prenesting (egg-laying behavior)

26 April 1981

	♂297	♀435	♀623
0950 nobody			
0955	Follows (0)		
1000			
1005	FTF (8)		
1010			
1015	MAF (2)		
1020 ♂297 10g ♀435 treehouse			
1025 " " NI			
1030 ♂297 10g ♀435 Blue oak area I			
1035 ♂297 10g ♀623 S Ridge ♀435 elsewhere			
1040 ?			
1045 ?			
1050 ♀♀ S Ridge ♂297 10g I			
1055 ♂297 ♀435 g			
1100 ♂297 10g ♀435 ♀623 S ridge I			
1105 ♂297 10g " " Elsewhere NI			
1110 all 3 g			
1115 all 3 g NI			
1120 2 ♀♀ S ridge ♂297 10g			
1125 ♂297 g ♀623 Oak ♀435 S ridge			
1130 ♂297 ♀435 10g ♀623 S ridge (?)			
1135 ♂297 10g ♀435 ravine			
1140 ♂297 10g ♀435 elsewhere NI			
1145 all 3 treehouse			
1150 ♂297 10g ♀435 Blue Oak			
1155 ♂297 20g ♀435 S ridge			
1200 ♂297 in nest ♀623 treehouse ♀435 elsewhere			

1205 ♂297 ♀435 10g |
 1210 ♂297 10g | NI
 1215 " " "
 1220 " " "

End

27 April 1981

	♂297	
0700 ♂297 g ♀435 elsewhere	(0) F	
0705 ♂297 g ♀435 Blue oak	(6) FTF	
0710 ♂297 g ♀435 S ridge	(0) MAF	
0715 " " " NI		
0720 " " " "		
0725 " " " "		
0730 ♂297 g ♀435 blue oak		
0735 ♂297 g ♀435 S ridge		
0740 ?		
0745 ?		
0750 ?		
0755 ♂297 g ♀435 nest (?)		
0800 ♂297 g ♀435 Blue Oak		
0805 ♀435 nest tree ♂297 g		
0810 ♀435 S ridge ♂297 g		
0815 ♀435 ♂297 g		
0820 ♂297 g ♀435 Ravine		

Melanerpes formicivorus1500

(27 April) Nest checked 0945. A new egg, marked #3 and returned. Probably laid about 0745 or so.

28 April Nest checked 1800. Egg #4, laid today, marked and returned. Eggs warm. Incubation probably in progress.

29 April ~~Nest check~~ 1600. Egg #5, laid today, marked

3 May Nest check 1230 6 eggs! The sixth probably laid 30 April, or conceivably 1 May. #6 still looked fairly fresh.

(1) 25.0 x 19.7 (25 April)

(2) 25.2 x 20.3 (26 April)

(3) 24.3 x 20.2 (27 April)

(4) 24.5 x 20.1 (28 April)

(5) 24.6 x 19.8 (29 April)

(6) 24.7 x 19.6 (30 April) (or 1 May)

11 May Nest checked 1530 All 6 eggs have hatched.

(1) Blue back stripe 14.5g

(2) Blue R wing + heel 13.3g

(3) Blue L wing + heel 11.0g

(4) Green R Flank 9.8g

(5) Unmarked 4.5g

(6) runt (green all over) not weighed

All hatched by 12th day after clutch completion. I would bet that at most only 4 of these guys will make it.

17 May Nest check 1330. Sorry to report that not a trace of the food coloring marks is still visible after 6 days. Anyway 4 nestlings! I'm sure that the 2 really

Melanerpes formicivorus1500(17 May) Small ones of 11 May were the two that disappeared.Red-Or (defective ^{Left leg} 3rd toetail (claw)) 34.0 g

Mauve-BLK 42.0 g

L Green-Or 36.5 g

Not banded 25.3 g

All 4 should fledge, I would think.

28 May Routine nest watch 1010-1210. However, ♂622, who was certainly at Blom One 26 May, was here helping at the nest!! ⁵ trips, feeding young, wakaing with ♂297, etc. His days at Blom one may be over.8 June Photo session here in the afternoon. All 4 adults sta- feeding nestlings.18 Aug Start ~~1050~~ 1050. 1215, Lots of news! The first bird I find here turns out to be ♀601 ^{L Green / Yellow} Metal / wht - L Green of Gate. She looks like she belongs here all right, although I did see her open-wing waka with ♂297 ^{Yellow / D Green / Or}. Looks bad for ♀435. She must have died during mid July (last seen 3 July). Also, Juv. 676 ^{DBLue-white / BLK-white} (still in Juv. plumage) here, but I was sure I saw ♂297 chasing a juv around the Blue Oak flycatch perch tree. Where are the other Juv and ♂622 and ♀623? What about J678, seen at Blom 2 4 Aug? Was his movement over there precipitated by the new ♀ arrival here? End 1310. Only those 3 birds seen. In fact, I saw 3 fly off way downstream along Big Creek, toward Horsetail, and I got no other hint of anybody else nearby. Note. I saw ♀601 at Gate on 16 July, so I suspect she moved about 1 Aug ± 2 weeks.

Melanerpes formicivorus1500

22 Aug A quick pass here 1230, only ♂297 Or/Yellow-Dgreen and ♀601 Lbrn/Yellow in evidence. See Blom 1 notes from 20 Aug.

1 Sept Looking here 1600. It looks like 4 birds are around now. Definitely ♀601 metal/white-Lgreen, ♂297 Or/Yellow-Dgreen and J676, starting to look very much like a ♂ (DBlue-wht/Blk-wht) (wht-DBlue/M) also, the 4th bird may have been J675 Grn-wht/Dan

14 Sept I see 4 birds in the Blue Oak Knoll tree, one of which was J676 DBlue-wht/Blk-white which was at the Blom cattle pond moments earlier. 0800. Also, at the Blom one Knoll, → J677 M/DBlue-Yellow (N) in ♂ plumage!

30 Sept Watch + granary census here, 1100-1300 data on reverse. Well, more changes. ♂297 + ♀601 here all right, but ♂622 Blk-Or/Blk, see- at Blom 1 on 14 Sept, is back here at 1500! So indeed are Juvs ♂677 M/DBlue-Yellow (N) Grn-wht/M and Juvs 675, 676 DBlue-wht/Blk-wht, both apparently starting to molt into ♀ plumage! Maybe I've been jumping the gun about sexing juvs this year.

* Storing has begun! I saw ♂622 store 3 acorns, but no one else. Obviously, not in earnest yet.

There seems to be a bit of intra group tension, but for the most part ♀601 looks remarkably tolerant of the 2 ♀(?) Juvies. All 3 were seen on a branch together, and though I did see ♀601 give one of the 2 Juvs a mild peck, it certainly didn't look serious.

This means only Juv 678 not accounted for. Is he dead, or still hanging around Blomone or Blom 2

1500 granary census

30 Sept 1981

1100 - 1300

1100 g nobody | ♂ J677 Blue Oak
05 ♂622 ♂297 1°g |
10 ♂622 | J♀676 BO
15 J♀675 g others |
20 J♀675 y | ♂622 BO
25 ♂622 2°g |
30 ♂622 2°g, ♀601 J675, 676 BO
35 nobody g | juv ♀675, 676 BO
40 J676, 677, 1°g |
45 ♀601 ♀675 ♂622 ♂677, ♂297 1°g | ♀676 2°g
50 all but ♂297 1°g |
55 everybody 1°g
1200 everybody 1°g
1205 ♂297 1°g
10 ♂297 1°g
15 ♂297 ♂622 1°g |
20 ♂297 g
25 ♂622 1°g
30 ♂622 1°g

1405 Flicker 2°g
♂622 chased 3
defense 1410 Flicker 2° Blue Oak
J♀676 1
1255 unid. passerine 1°g
♂622 1

Storage ♂622 11

35 nobody
40 ?
45 ♂622 1°g
50 ♂297 ♀601 1°g
55 ♂622 ♀676 1°g
1300 ♂677 1°g

Melanerpes formicivorus1500

** 6 Oct

Time for a group update. ♀435 is gone, last seen on 3 July (by Mary Peacock). She was certainly gone by 18 Aug, when I watched and found ♀601 there, so I would say ♀435 disappeared 24 July $\pm$ 2 weeks. Same situation for ♀623. It's unclear whether she disappeared along with ♀435 (both killed at a roost hole, perhaps?) or ♀435 disappeared first, and the subsequent arrival of ♀601 precipitated ♀523's departure. At any rate, ♀623 has not been seen since, so ♀623 disappeared 24 July $\pm$ 2 weeks.

♀601 was still present at Gate on 16 July, but was first seen at 1500 on ¹⁸~~16~~ Aug, and already looked quite "comfortable" with ♂297, so ♀601 immigrated as adult on 2 Aug $\pm$ 2 weeks.

♂622 is a problem. He very definitely moved to Blom-²⁰one about ~~20~~ July $\pm$ 2 weeks. He was at 1500 3 July, at Blom 1 definitely on 20 Aug (and probably 4 Aug as well). He was still at Blom 1 on 14 Sept, then seen back at 1500 on 30 Sept, so ♂622 returned

**

22 Sept $\pm$ 1 week.17 Oct

♀601 and ♀676 at Y.

21 Nov

Good complete census here, 1045-1115. ♂297, ♂622, ♀601, ♀675, ♀676, ♂677 all seen well. Lots of storing activity in both the knoll blue oak and the 2^o y. No storing seen in the 1^o granary.

8 Dec

Counted stores, 1500:

2^o granary320TOTAL 2020

Main

1700

1981

R.L. Mumme

Melanerpes formicivorus

1800

Hastings Reservation13 Jan

Start 1240. granary census on back.

♀193

DBLue-LPrk/DBLue

♂476

Black/LGreen

♂561

Yellow-BK/M

Yellow/Blk

♂562

wht-LGreen/White-LGreen

♂564

Metal/Red-BLK

Red-BLK/Red-BLK

♀565

wht/M

wht/LBlue

all see right away.

Very warm, sunny day, birds flycatching. 1340, ♂347 shows up,
LPrk-DBLue/LPrk

Metal/ so that makes a complete census, presuming

♀563 is indeed dead. 1345 ♀565 chatters vociferously, not

sure why, ♂? nearby. A small storage limb (20 holes at most)

seems to be missing. I'll check the ground underneath the

granary. End 1440.

11 Feb

Start 1200 granary census on back.

1305, ♀ NB intruder,

mildly chased by ♀565. Intruder in top of granary

1320 Big alarm call scare, birds fly to holes in granary VO.

One bird "frozen" to underside of Blue Oak 50 m N. No

activity for 20 minutes, then big bout of harrits, then

flying to each other, wakas. "All clear" at 1340. Then at

1347, another dash to the holes, and again I don't see the

problem. 1354, more harrits. At least 3 birds were in holes

this time. Only one emerges.

♂564 is conspicuously absent. ♂476, ♂347 ♀193, ♂561,

♂562, ♀565 all see well & repeatedly. I suspect that

♂564 may be gone. I suppose he could still be here, but unlikely.

End 1400.

17 March

Start 1310, granary census. Good watch here. ♂476,

♀193, ♂347, ♂561, ♂562, ♀565 all seen well on

numerous occasions. Also, it looks like ♂564 is

here after all, or at least somebody with ♂ Metal/Blk
P, which
was what I read

13 Jan 1981 1800 granary census

1240 nobody
 1245 ♀193
 1250 ♀193 + ♂476
 1255 ♂476 ♀565
 1300 ♂476 ♀193 ♂562 ~~MAAA~~ ♂564
 1305 ♂476 ♀193 ♂562
 1310 ♂562
 1315 nobody
 1320 "
 1325 "
 1330 "
 1335 "
 1340 ♂347 ♀193

1345 ♀565 ♀193 ♂564
 1350 ♀565
 1355 nobody
 1400 "
 1405 "
 1410 ♂347 ~~MAAA~~
 1415 ♂347 ♂562 ♂564 + others
 1420 ♀193 ♀565 ♂564
 1425 ♀193 ♀565 ♂564 ♂562 ♂?
 1430 ♀193 ♀565 ♂562 ♂?
 1435 ♀193 ♂476 ♂562 ♂564 ♂?
 1440 ♀193 ♂476 ♂564 ♂

11 Feb 1981 1800 granary census

1200 nobody
 1205 "
 1210 ♀193 ♂562
 1215 ♀193
 1220 ♀193 ♂562 ♂?
 1225 ♀193 ♂562 ♂347 ♂561
 1230 ♂476 ♂347
 1235 ♂347 ♂561 ♀565
 1240 ♂476 ♀193 ♀565 ♂561
 1245 ♀193 ♂562
 1250 ♀193 ♂562 others
 1255 ♂347 ♂476 ♂561 ♂562
 1300 ♀193 ♂476

1305 ♂347 ♀565
 1310 ♂561
 1315 ♂347 ♂476 ♂562
 1320 ♂561 ♂476 others
 1325 Alarm call scare, birds in granary roost holes
 1330 "
 1335 "
 1340 "
 1345 ♂562, 2 other males
 1350 ♂562, 2 other males in holes, alarm scare
 1355 "
 1400 "

1800 granary census 17 March 1981

1310 ♀193
 1315 ♀193
 1320 ♀193
 1325 nobody
 1330 nobody
 1335 "
 1340 ♀193 ♂561
 1345 ♀565 ♀193 ♂562
 1350 ♀193 ♀565 ♂562, ~~MAAA~~ ♂561
 1355 ♀193 ♀565, ~~MAAA~~ ♂561, ♂
 1400 ♀193 ♀565 ♂561 ♂
 1405 ♀565 ♂561 ♂
 1410 ♂476 ♀565 ♂561

1415 ♂476
 1420 ♀193 ♀565 ♂347 ♂564
 1425 ♀193 ♀565 ♂347 ♂564
 1430 ♀193 ♂347 ♂564 ♀565
 1435 ♀565 ♂347 ♂564
 1440 ♀565 ♂347
 1445 ♂347 ♀565
 1450 ♀193 ♂347
 1455 ♂561 ♀193
 1500 ♂347 ♀193
 1505 ♂347 ♂476 ♀193
 1510 " " "

Melanerpes formicivorus1800Hastings Reservation

11 April Start 1225. as Walter, Steve + Natalie Emlen, + I walked up, a bird was at the nest hole. 1240, ♂476 shows up alone. I suspect either these guys aren't ready to nest, or they already have one. Very little action here. End 1345.

20 April Start 1625. 1655, Nothing! Birds originally over toward 1500 metal/B/K-Red then walk down by Big Creek. end, ♂564 seen but that's all. Later birds on 5 ft below 5 ft west

22 April Start 1530. Again, little action 1550, ♀193, ♂347, ♂476 show up, ~~and~~ and ~~♂193~~ ♀193, along with ♂564, actually sapsucks from the live oak beneath me at the watching spot. ♀193 flew off toward the 2^o granary after awhile, ♂476 followed, ♂347 did not. Suspect that they aren't ready yet. No interest in the usual nest hole. 1630, ♂562 sapsucking too. end watch.

26 April Start 1430. Both ♂♂ now seem to be following the ♀ in earnest. By 1640, though, I've still yet to see anybody take a peek at the nest hole. Birds flew off a couple of times toward the S. going to look there.

27 April Start 0830, watching from Pearson field. Earlier while watching at 1500, I saw several birds going in and out of the hole in the short broken stub on the S side of the tree. Hole faces Big Creek. 0930. Not getting anything done. Can't read bands from here. No more interest seen in that hole. Doesn't look really serious yet, but I should watch here tomorrow afternoon. Looks like ♂♂ are still following ♀♀.

28 April start 1500 from usual spot above the granary,

26 April 1981 1800 Pre-nesting behavior

♀ 193

1445

1450

1455

1500

05 core 3 g |

10 " | NI

15 ♂ 561 g

20 ♂ 561 g NI

25 " "

30 core 3 g + others |

35 " " NI

40 core 3 g | NI

45 " "

50 " "

55 " "

1600 Core 3 ♂ 562 g | NI

1605 ♂ 561 562 ♀ 193 sap tree ♂ 347 476 ♀ 565 1° g |

1610 all 8 members g | NI

1615 " " " " NI

1620 " " " " "

1625 Lots of birds

1630

1635

1640 core 3, 1 other g |

~~both~~ follow

FTF

MAF

♂ 476

♂ 347

(3) both |||

♂ 561

1

27 April 1981

Melanerpes formicivorus180028 April

Start 1500. ♂♂ very tightly following ♀ ~~344~~ 193. Also saw a nice mounting between ♂476 + ♂347, about 1625. No aggression, pecking, etc. as they mounted each other briefly (< 1sec). Couldn't catch who mounted who first. Occurred on horizontal branch on very top of granary. Complete census: ♂561, ♂562, ♂564, ♀565 all seen quite well. 1700, another ♂♂ mounting. After flying back to the granary, the 2 ♂♂ landed next to each other on horizontal branch near the top of the granary. ♂476 made a feeble attempt to mount ♂347, but did little more than to "rub wings". ♂347 then fully mounted (for about 1sec) ♂473. No pecking or aggression. End 1710.

29 April

Start 1645. 1735, wow, a real copulation, between the two ♂♂, ♂476 + ♂347. The core 3 flew out of the sap tree, to the granary. ♂347 + ♂473 landed together on a horizontal limb. ♂476 then mounted ♂347 briefly, then ♂347 gave ♂476 a what appeared to be a full-fledged copulation! Bizarre. Good cloacal contact 4-5sec duration, tail twist. Talk about kinky sex. I've seen a couple of other ♂-♂ mounting today, but nothing like that. 1800, ♂476 "gets screwed" ^{again} by ♂347 in the same circumstances. Very strange.

1810. Another ♂-♂ copulation. This time ♂476 initiated by flying to the side of ♂347. 347 mounted briefly, the 476 "copulated" with 347, although it was of less duration (about 2 seconds) than the previous. @ 1842 ditto

1800 Prenesting 28 April 1981
 1500 ♂561 ♂
 1505 " " NI
 10 " " NI
 15 " " NI
 20 core 3 ♂562 g
 25 " " NI
 30 " " NI
 35 core 3 others g
 40 core 3 sap tree
 45 core 3 + others g
 50 core 3 ♂564 ♀565 ♂561 g / core elsewhere
 55 " " NI

both ♂♂ follow
 FTF MAF
 IIII IIII

♂476
 ♂347

♀565
 II

1600 ♂561 ♀565 g / core elsewhere NI
 1605 " " " " NI
 10 ♂564 others g
 15 core 3 ♂564 others (?) g
 20 core 3 ♂564 ♀565 g / NI
 25 " " " ♂561 g / NI
 30 core 3 g ♂564 ♀565 I
 35 core 3 others g / NI
 40 ♀565 ♂564 g / core elsewhere
 45 ♂561 ♂564 g (others?) core elsewhere
 50 core 3 ♀565 ♂561 g
 55 " " " NI
 1700 " " " I

both ♂♂ follow ♀193 (10)
 FTF (0)
 MAF (0)

29 April 1981 1800 prenesting behavior
 1640 core 3 ♂562 g
 1645 core 3 sap tree, others g
 1650 core 3 ♂562 ♂564 sap tree I
 1655 core 3 g
 1700 core 3 20 g / ♂564 sap
 05 ♂564 g / core elsewhere
 10 ♂564 ♂562 sap tree / core elsewhere
 15 core 3 ♂562 g, ♂564 sap tree
 20 core 3 others g NI
 25 core 3 ♀565 near g
 30 " " " NI
 35 core 3 ♂562 sap tree
 40 ?
 45 ♂564 sap tree others g
 50 core 3 others g NI
 55 " " " NI
 1800 " " " NI
 05 " " " NI
 10 " " " NI
 15 core 3 g I
 20 " " " NI
 25 " " " others g NI
 30 " " " "

both ♂♂ follow
 FTF MAF
 IIII II
 ♂347
 ♂476
 ♂562
 ♂564
 both ♂♂ FAF ♀565 I

35 ?
 40 ?
 45 core 3 g
 50
 55
 1900

(7)
 (0)
 (1)
 (1) ♂

Melanerpes formicivorus1800(29 April)

Many more ♂-♂ copulations + mountings occurred before roosting. I'd say 10 total for the afternoon.

♂347 seemed more intent on screwing ♂476 than vice versa.

Never saw any aggression between ♂♂, or mounting of the female.

3 May

Watching from the lane 1130. Lots of action in the broken-stub hole on the S side of the granary (hole facing Big Creek). At least 3 birds in together on one occasion. Birds may or may not have laid yet.

Watching from usual spot above granary 1610.

♂♂ still hot for following the ♀. No ♂-♂ mountings seen today though. Lots of action around the broken stub hole. I really should peep in there tomorrow.

End 1730.

4 May

1330
Checked the stub hole here with the peeper. No eggs yet. These guys are going to be like Gate + Rd 3, keeping us waiting.

5 May

Hole check at 1400. Still nothing.

6 May

Well, checked the stub hole with the peeper at 1500, and 1 egg! Laid today, without doubt. Will have to open soon.

7 May

Hole checked + opened at 1330. 2 eggs, another one laid this morning. Two eggs numbered 1 + 2, but this does not correspond to known laying sequence.

Watching 1555. 1645, core 3, ♀565, + others in top

of granary when ♂561 flew from sap tree to the branch right next to ♀193. ♂476 immediately flew over and started

3 May 1981 1800 Pre-nesting

1710 nobody

1740 core 3 sap tree | NI
1745 " " " | NI
1750 core 3 ♂561 ♂564 g
1755 " " " " g | NI
1700 ?
1705 core 3 ♂561, ♂562 ♂564 g |
1710 " " g NI
1715 core 3 g I ♂561, 562, 564 NI g |
1720 all but ♀565 g NI
1725 " " NI

both ♂♂ follow HHT

FTF

MAF

(5)

(0)

(0)

7 May 1981 1800 Egg-laying

1555 core 3 others g
1600 core 3 sap | others g
1605 core 3 ♂561 g | ♂562 sap
1610 core 3 g | ♂561 sap NI
1615 core 3 g | NI
1620 core 3 ♂561 sridge area |
1625 nobody
1630 ♂561 g | core elsewhere
1635 core 3 ♂561 ♀565 g
1640 " " " NI
1645 " " " + others g | NI
1650 ?
1655 ♂561 g | ♂564 sap (core elsewhere)
1700 " " NI
1705 " " NI
1710 " " NI
1715 ?
1720 ?
1725 core 3 sap tree NI
1730 " " NI

1735 core 3 sap NI
1740 " " " NI
1745 core 3 ♀565 ♂562 g
1750 " " " g NI
1755 core 3 others g | I
1800 ♂561 g | core 3 sridge
1805 core 3 g
1810 " NI
1815 ?
1820 ♂561, others g | core elsewhere
1825 ♂561 ♂564 g | " " NI
1830 core 3 sap | others g (♂561, ♂564)
1835 ♂561, others sap | core 3 elsewhere
1840 core 3 nest area, others g
1845 ?
1850 core 3 sap
1865
1900

♀193

F

FTF

MAF

both ♂♂

(15)

||||

||||

||||

(0)

(0)

♂476

♂347

Melanerpes formicivorus1800

(7 May) to peck hard at the head of ♂561. Then ♂476 hitched up the branch, and I'm fairly sure (not positive) that he gave ♂347 a quick peck to the head. I definitely saw ♂347's head turned away in the usual subordinate manner.

On toward roosting, I saw a pair of good ♂ - ♂ copulations. On one, ♂347 lightly mounted ♂476, then ♂476 gave him a good, 4-5 sec, tail twist "copulation". Saw the same sort of thing a bit later, but I couldn't see who initiated. At roosting, the "packing" by the core 3 was extreme. Very tight, but I couldn't see any evidence of mounting of the ♀, dominance, etc.

9 May a peep-in hole check at 1145. 4 eggs, so ♀193 laid both yesterday and today. A ♀ (presumed ♀193) was in the hole when I arrived.

11 May Hole check 1700. 4 eggs, so clutch complete as of 9 May. Expected Hatching: 20 ~~20~~ - 21 May. Hole Opened, eggs measured.

① ~~24.1 x 19.5~~ 24.1 x 19.5

② 23.4 x 18.7 (failed to hatch)

③ Fucked up 24.3 x 19.5. Air cell in middle of egg, weird calcium chip on surface of egg over the air cell

④ 24.0 x 19.0 (freshest looking, probably last laid)

→ Roosting, pretty sure it was ♂476 alone. A 2nd bird ~~at~~ looked in 'till quite late, but then flew off.

18 May Roosting again. Pretty sure it was ♂476 alone. I think I saw Black, and definitely no metal on the left leg.

1981

R.L. Mumme

6

Melanerpes formicivorus1800

19 May Nest check 1600. Only 3 eggs! Once again, an egg mysteriously disappears from the nest at about the time of hatching. I heard peepings from the other 3 eggs, so I'll bet hatching will be tomorrow.

20 May Roosting, and a switch! One ♂ was in the hole, looking out, and ♂347 (certain I saw the metal lower left) came and entered as well. I waited quite late to see if anyone would fly out, but no one did. Thus, ♂476 and ♂347 both roosted in the nest

21 May Nest check 1130. 2 eggs have hatched, 1 egg not yet hatched.

23 May Another nestcheck, 0900. 2 babies, 1 un-hatched egg (#2) removed. Perhaps the egg that disappeared was #3, the egg with the bizarre "central" air cell. I should have opened the nest then to find out. However, I don't think it could have produced a normal nestling, so it probably was the one that disappeared.

24 May Roosting. One bird roosted, and judging by the fact that I couldn't see anything on its leg, I would guess that ♂476 roosted. (I should have been able to see the metal if ♂347 roosted.)

25 May (♂562 seen ⁰⁹⁰⁰ at Low Hay) Roosting, ♂476 alone again.

26 May ♂561, ♂562, ♀565 intruding at Blom one, 1010.

Nestcheck 1200, 2 healthy babies

① BPrk-wht (N) 26.0g

② NB 19.5g

Had trouble getting the babies out. I really should have made the cut quite a bit bigger

Melanerpes formicivorus1800

27 May Roosting. ♂347 Metal was at the hole looking in when I arrived at 1930. At 1940, ♂476 landed to the left of ♂347, and ♂476 entered. ♂347 then flew off, meaning ♂476 roosted alone.

8 June Roosting. A ♂ not 476 or ~~347~~ was looking out when I arrived. Very late ♂476 arrived, but the bird in the hole did not fly out for several seconds. Finally, ♂476 gave the other bird a peck on the head. It exited, and ♂476 roosted alone.

10 June Banding 1700. Banded nestling becomes ^{M / L Blue-Red} ~~Red / L Blue-Red~~
(Mauve nestling)

11 June After all day nestwatch, ♂476 roosted

20 June Watching here for fledglings, 1645. 1815, very dull.

I've seen at least 6 adults, mostly in the 2° area.

No sign of the juveniles, no evidence of birds carrying food, etc. Whoops, I find babies still in hole. Whoops!

23 June Start watch 1630. Once again, I just can't find the babies. end 1730. Are they still in the hole? Yes!

28 June Start 1245, from Pearson Field. A juv seen flying in & out of the hole 1600. Well, both juvs seen, + all adults except ♂347. J695 was keeping a pretty low profile at first, didn't see him until quite late.

30 June watching 1620. Lots of birds in & out of the sap tree, including Orioles and Titmice. Ⓢ Plus a ♂ Black-headed Grosbeak (!) drinking from the live oak. Both juvs seen, and a few suspicions that J695 > J696, but nothing definite.
End 1745

Melanerpes formicivorus1800

2 July Watching for juv down 0830. Success, I think! Pretty sure that I saw J695 peck hard at J696 twice while the birds were together on a limb in the granary. An adult near. I was positive of the identity of the juveniles, but not notably sure that I saw J695 peck at J696. Will try here again. End 1030

4 July Here again 0730. Again, one probable J695 & J696. I was watching 696 in a valley oak upon the S ridge, when J695 flew in and approached J696 from below. I then saw a squabble, and 1 bird fly off, and I think it was ⁶⁹⁵~~J695~~ pecking at J696. Makes ~~sense~~ sense, since J695 approached 696, not vice versa.

Also think I found a roosthole that I didn't know about, in an open live oak (!) on the south ridge, about $\frac{1}{2}$ way up the trail to the usual watching spot. Watching roosting here while the nest was still active, I remember seeing birds flying in that direction. End 0930.

Aug 18

Start above granary 1320. End 1420. Virtually nothing, only ♀193 ^{DBLue-CPK/DBLue} in the granary briefly. Not even anybody in the Sap tree. These guys are out of acorns, too.

22 Aug

Watching here 1130. Well, J696 ^{Or-unt ✓ or-BIK} Metal / Or-unt in the top of the granary, with a nice white eye and what looks like glossy ♂ plumage. Good! ♂476, ♀193 also appear briefly, but very little activity. End 1230 Whoops, also ♂561 ^{Yellow-BIK/n}

1 Sept

Good census here finally 1715-1830. ♂476, ♀193, ♂347 (I was worried about him at first), ♂562, ♂564, ♀565, ♂561 (late) J695, J696. Complete census. What's more,

J695 7 J696 11 July (probable)

Melanerpes formicivorus1800

1 Sept I'm fairly certain that both J695 + J696 are in full blown ♂ plumage. Geez, isn't anybody going to produce ♀♀ this year? Interesting we have almost all ♂ juvies this year.

30 Sept Watching, 1400. Granary census on back. 1500, giving up. Couldn't see birds well at all today. Only ♂561 yellow/Bk seen at all well, and I watched him store 3 Blue Oak acorns in the hour I watched. Birds also showed a bit of interest in the 81 nest hole and the "short stub" roost hole, but I don't think it means nest.

Whoa, walking out at 1500, I find a ♂ looking out of the "short stub" hole. What's more, he doesn't flush until I climb halfway up the tree. No "baby" noises. Will have to check

1 Oct Watching from Pearson Field 0850, I find a bird in the 1981 nest hole and ♀193 at the hole looking in. Most peculiar. Both leave 0904. 0930, Nothing more. I guess these birds were just fooling around.

15 Oct Trying again, 1400, granary census on back. 1530, Another waste of time. No storing, nothing. Will lump with the 'hr from 30 Sept, and try in the morning sometime.

17 Oct ♂561, ♀564 and J695 all at Y. J695 is actually a definite ♀ (I goofed).

29 Oct Trying again, 1115. Granary census on back. Yesterday, ♂564 and ♀695 were at Y, but ♂564 is back here today. 1300, almost a complete census. ♂347, ♂476, ♀193, ♂561, ♂562, ♀564, ♀695 all seen well. ~~Only~~ Only ♂/♀ (J) 696, who was at Y on 19 Oct, not seen. Some storing activity, too.

1 Nov Granary census again, on back at D. 10.

1800 Granary census

30 Sept 1981

1400-1500

60 min

1400 J696, 2 others /

05 " "

10 ? (somebody there)

15 ♀193 + others

20 ♀193 + others

25 ♀193 + others

30

35

40

45

50

65

1500

quitting,

not seeing birds well enough

Storage ♂561 11

(3)

(in 60 min)

1800 granary census

15 Oct 1981

1400-1600

1405 nobody

10 ~~♂347 ♀193 ♂562~~

15

20

25

30

35

40

45 Forget it

50

55

1500

29 Oct 1981

1115 nobody

20 ♂347 ♀193 ♂562

25 nobody

30 "

35 ♂347 ♂562 ♂564

40 ♂561 ♂564

45 ♂561

50 ♂476 ♀193 ♂561

55 ♀193

1200 ♀193 ♀695

05 ♀193

10 ♀193 ♂476 ♂561

15 ♂561 ♂476

20 ♂476

25 nobody

30 ♂476

35 "

40 "

45 ♀193

50 ?

55 ♂562

1300 ♀193 ♂562

05 ♀193

10 ♀193

15 "

(5) ♂561 44

(4) ♂476 111

(1) ♀193 1

(2) ? 11

(2) ♂562 11

14 7/hr

defence

1155 ♀193 1 Junco

1158 ♀193 1 Titmouse

Melanerpes formicivorus1800(7 Nov)

♀ 696

Or-wht / Or-Bk

is definitely in ♀ plumage! Good

0950, ♀

DBlue - yellow (IV) / yellow

" " " / metal, intruding here, chased out (vigorously) by ♀ 193, mildly by ♀ 696.

1000, The core 3 (♀ 193, ♂ 476, ♂ 347), and the two first year ♀♀, 695 + 696, all here, but no sign of the 3 helper ♂♂ yet. Could they be at Y (or elsewhere?)

1030, end. ♂ 561 + ♂ 562 show up late, only ♂ 564 not seen

9 Dec

1600, counted stores:

fallen limbs, odd trees

290

main granary

620

TOTAL

910

7 Nov 1981

1800 grandary census

0830 - 1030

0830 ♀193 ♀696
35 " " ♀695 ♂476
40 " " " " ♂347
45 " " " " ♂347
50 ♀696
55 nobody
0900
05
10
15
20
25
30

0835 nobody
40 "
45 "
50 ♀193 ♀696
55 ♀696
1000 ♀696 ♂347
05 " "
10 " " ♀193
15 " " "
20 " " ♂561
25 " " "
30 " " "

NO STORAGE

defense
0950 ♀ ♀193 3
♀696 1
1020 Jan-1 Several birds 2
♂562
" ♂476 ♀193

Melanerpes formicivorusHaystack - BlomquistHastings Reservation21 Jan

start 0900. granary census on back. 0955, nobody yet in granary, but I spot ♂173 and ♀484 camped out sapsucking in a valley oak NNW of the granary, ♂173 ^{Or/Blk} or/m, ♀484 ^{Light/Blk} Light/Blk. Looks unpromising for ♂576. No sign of him. The sapsucking is occurring in the big Poison oak infested Valley Oak ~75 m NNW of the granary, on a nearly horizontal limb, upper middle. Plus a branch above that one. End 1115

7 March

Start 0900. Granary census on back. ♂173 ^{Or/Blk} or/m and ♀484 ^{Yellow-L/Blk} Yellow-L/Blk here as always. Not much action in the sap tree of 21 Jan. ♀484 there briefly, but that was it. Not much flycatching, either. Working acorns in granary a lot. No sign of ♂576, so he must certainly be dead (1 Jan ± 3 weeks). End 1050

5 April

A look here at 0945. ♂173 ^{BPnk Orange/Blk} or/m + ♀484 both here, but a lot of other birds hanging around. Possibly some 1800 birds in the nest tree area, others on top of Haystack, in the "many-holed" Valley oak, etc. Doesn't look seriously like a nest anytime soon. ♂173 flew away from the ♀ for one long period. ♀484 did chase two bluebirds away from ^a the cavity in the multi holed tree in a vertical broken stub in the center of the tree (hole faces granary). 1 High flying Cooper's Hawk. End 1030.

24 April

Introduced egg (from Plaque birds) into nest hole here, after Mary reported interest in this hole. I also stay around to try to get a picture, but nothing results. Birds (both ♂ & ♀) came to the hole a lot for a constant war with a pair

21 Jan 1981 Hay Blom granary census

0900 nobody	0935 nobody	1005 nobody	1035 ♂173
0905 "	0940 "	1010 ~~nobody~~ ♂173 ♀484	1040 ♂173
0910 "	0945 "	1015 ♂173	1045 ♂173
0915 "	0950 "	1020 ♂173	1050 ♂173
0920 "	0955 "	1025 ♂173	1055 ♂173
0925 "	1000 "	1030 ♂173	1100 ♂173
0930 "			

7 March 1981 Hay Blom granary census

0905 nobody	0945 ♂173	1020 nobody
0910 nobody	0950 nobody	1025 "
0915 "	0955 ♂173 ♀484	1030 ♂173
0920 "	1000 ♂173 ♀484	1035 ♂173
0925 ♂173 ♀484	1005 ♂173	1040 ♂173
0930 ♀484	1010 nobody	1045 ♂173 *
0935 ♀484	1015 nobody	~~1050~~ 1050 ♂173
0940 nobody	1020	

Melanerpes formicivorusHay-Blom

- (24 April) of bluebirds trying to take over the hole. Unfortunately, nobody went ^(+down) into the hole. Mary, watching here after I left ^{at 1130}, reported birds going in, but she saw no egg tossed.
- 25 April Hole checked 1000. Egg is gone!! within 24 hours!
N = 3.
- 26 April Introduce egg at 0700. Watching to try to get photo of "egg-tossing". 0900. Windy, cold. Bagging it. Leaving a plaster egg in the hole. No birds came to nest while I watched.
- 28 April Nest check 1000. Plaster egg is (of course) gone.
N = 4 (5?) Fake egg was heaved out within 48 hours.
- 7 May After hearing from Mary that Hay Blom birds were not going to the usual nest hole, and that she was seeing only one bird at a time, I come up here at 0700 to see if another nest is about. The answer is unfortunately yes! After seeing ♂173 fly from the granary off to the northwest, I walk around and see him looking out of a hole in a Valley Oak 50 meters due north of the Big Poison Oak patch. Hole faces the granary, and is the lower of two holes that occupy an upper Branch. Hole is located near a fork. I think the tree can be free climbed, with the help of webbing.
- 3 Aug Looking for Juvs here, 0815. May not be easy, as they have very few acorns remaining. 0910, Forget it. ♂173 br/m and ♀484 ^{BRN-OR/BLK} Yellow-LBlue/BLK both here, the ♀ seen in the granary eating stored acorns. No sign of the juvs.
- 19 Aug Trying again 0820. These birds are now definitely out



Melanerpes formicivorusHaystack - Blomquist

(19 Aug) of acorns. Cool, foggy morning. 0945, Geez, these birds never cease to amaze. I track down the ~~the~~ birds finally (nobody coming to the granary) at the edge of the field on the Blomquist Ranch, hanging around the spot where the old dead tree has fallen across the hog-wire fence. Who should I find but ♀604 ^{Red-wht/Blk} " / " and then later, ♀523 ^{Metal / Red-DBlue} ^{DBlue-wht / DBlue} Geez Louise! They both looked very cozy with ♂173, so I have to believe that ♀484 bit it 10 August ± 1 week (probably closer to 5 Aug, would be my guess). I very definitely saw ♀484 in the granary 3 Aug, and ♀♀523 and 604 at Low Hay that same day. Now, the ♀♀ look comfortable with ♂173, I'd guess that they've been around at least a week. Also, both juvs seem to be fine (!) J711 ^{LBlue / Red} ^{Metal / Red-LBlue} Seen very well on several occasions and I'm pretty sure (not positive) that I saw J712 ^{wht / LGreen} as well. If I did, I also got a hint that J711 > J712, as the latter seemed to wait until J711 left before approaching ♂173. Interestingly, I did not see the new ♀♀ attend to or feed J711. Only ♂173 was taking any interest in J711. In fact, I saw ♀604 peck Lard at juvs at least a couple of times, and ♀523 (I think) once. What do you know, no non-kin altruism. It would be good to tie that down. In fact, that will be extremely important to tie down. Will have to watch again soon here. Also, I found a sep tree: A live oak, of course near (15 meters N) of the fallen fence log. End 1020.

22 Aug Watching here 0750. 0930, confusing watch. ♂173, ♀523, ♀604, and J711 all seen well + repeatedly. I may yet have to back down on my report of J712. I did not see him well

Melanerpes formicivorusHay Blom

(22 Aug) at all on 19 Aug, and I certainly haven't seen him yet today.

Confusion was because of a lot of intruders, including ♂501
-yellow/m
L6rn / yellow of Finch, of all birds. Plus a Juv NB's that
seemed to be molting into ♀ plumage, and perhaps a ♂NB
as well. I may have seen ♀604 give J711 a little chase in the
granary, but with so much confusion with all the intruders, I couldn't
be sure. Today, the birds were not hanging out continuously
by the sap tree + hogwire fence, but were moving all over the
territory, and even visiting the granary a good bit. Lots of green
acorn harvesting from the Blue Oaks at the edge of the field.

20 Sept Watching here 0930. Bill Carner reported a NB bird here
a few days ago. Checking it out. 1110, well, a few noteworthy
things. ① I thought I saw ♀523 in the granary right after I
started watching, but now after a couple of hours, I haven't
seen her for sure. ♀604, ♂173, and J711 seen well
with certainty several times. Is ♀523 gone? Dead,
or moved back to Low Hay? Or School Hill even?

② The birds are excavating (removing wood chips, anyway) from
the hole above the 1981 failed 1st nest hole. Do they
have a fall nest in mind, or is this being cleared up for roosting.
Worth keeping an eye on, both for fall + next spring.

1220, over at Low Hay, it looks like ♀523 is here! See
Low Hay notes

5 Oct Granary census here, 0800-1000, on back. A lot of storage activity
early, but little later on. Mostly Blue Oak acorns I think,
gathered from area toward + beyond the ¹⁹⁸¹ ~~1980~~ 1st nest tree.
♂173, ♀604, J711 all here. No interest in any holes.

5 October 1981 Hay Blom granary census

0805 nobody
 10 ♂173 ♀604
 15 J711
 20 ♂604
 25 J711, one other
 30 nobody, (all 3 in nest tree, intruders?)
 35 ♀604 ♂173
 40 ♀604 ♂173
 45 ♀604 ♂173
 50 ♀604 ♂173 J711
 55 ♀604 ♂173
 0900 ~~0800~~ ♀604
 05 ♀604 ♂173
 10 ♀604 ♂173
 15 ♀604 ♂173
 20 ♀604 ♂173
 25 ♀604
 30 ♀604 ♂173 J711
 35 ♂173
 40 ♂173
 45 ♂173 ♀604
 50 ♂173 ♀604 J711
 55 J711
 1000 ♂173
 05 ♂173

storage
 ♀604 III III (8)
 ♂173 III III (8)
 J711 I (1)
 17
 2 hrs.

8.5 per hour
 4/hr ♂173
 4/hr ♀604
 .5/hr J711

defense
 0820 ?NB ♀604 2
 0828 Plain Tit, not chased
 eating bits in granary
 no adults near
 0840 Plain Tit ♂173 1
 0908 ♂NB ♀604 2
 ♂173 2
 0920 ? AW intruder
 ? 2
 0920 Plain Tit ♀604 2
 0923 Scrub Jay ♂173 1
 0924 Brown Towhee ? 2
 0955 AW?? ? 3

Melanerpes formicivorusHaystack - Blomquist

** 6 Oct GROUP UPDATE: ♀ 484 last seen on 3 Aug, clearly gone by ¹⁹ ~~10~~ August, ♀ 484 disappeared about 12 Aug $\pm$ 1 week. ♀ 523 + ♀ 604 both moved here about that same date. However, ♀ 523 then returned to Low Hay. ♀ 523 was still at Hay Blom on 22 Aug, but was back at Low Hay on 20 Sept. Thus, ♀ 523 moved ~~watched~~ group 6 Sept $\pm$ 2 weeks.

** Purge J 712: Not seen after landing @ 18 July

1 Nov A quick look here 1200-1235. ♂ 173, ♀ 604 both seen well.

The granary is filling up with acorns. J 711 also here.

5 Nov Granary census, 1100-1300 Highlight is that J 711 is positively in ♀ plumage. A bit of storing early but cool, cloudy, slight drizzle may have turned the birds off.

21 Nov Granary census, 1400-1600, on reverse. Complete census, but no storage, even though granary isn't full yet.

1 Dec Trying another granary census, ~~0830~~ 0830-1030, complete census

<u>Counted Stores:</u>	S Branches, East side	60	W side	60
	N " , down	80	W side	115
	"main" dead limb, E side	40	W	50
	Trunk	800		

Total 1200 doing pretty well!

A real storing frenzy while I was doing the granary census (see reverse) 41 acorns in an hour. At first they were harvesting from the same Live Oak as last year, along the old Blom fence line (28 sec roundtrip flight time), and later switched to a live oak on the Hastings side, S of the nest tree.

5 Nov 1981

Hay - Blom granary census

1105 nobody	1205 nobody
10 "	10 "
15 "	15 "
20 ♀604 ♂173	20 "
25 ♂173	25 "
30 ♂173	30 ♂173
35 ♂173	35 ♂173
40 ♂173	40 ♂173
45 ♂173	45 ♂173 ♀604
50 ♂173	50 ♀604
55 ♂173	55 ♂173 ♀604
1200 nobody	1300 " "
	05 ♂173 ♀604 ♀711

Storage

1st hr

2nd hr

♂173	III
♀604	III
♀ ~~604~~ 711	II

(6)
(3)
(2)

11

5.5/hr

21 Nov 1981

1400 - 1600

1400 nobody
05 ♀604
10 ♀604 ♂173
15 " "
20 " "
25 nobody
30 "
35 "
40 all 3
45 ♀604 ♂173
50 " "
55 nobody
1500 "

1505 nobody
10 ♀604
15 "
20 "
25 "
30 "
35 "
40 ♀604 ♂173
45 " "
50
55
1600

no storage

} cut short

1 Dec 1981

0830 - 1030

13 sec down
15 sec back

WS -- working store
S -- scanning
E -- eating acorns
P -- preening
F -- flycatching

0830 nobody
35 "
40 ♀604 WS
45 ♂173, ♀711, WS ♀604 WS
50 all 3, WS
55 all 3, WS
0900 all 3 WS
05 ♂173 E; ♀604, 711 WS
10 all 3 WS
15 " " "
20 ♂173 WS
25 ♀604 WS nobody
30 ♀604 E

0935 nobody
40 ♀604 WS
45 ♀711 WS
50 ♂173 ♀604 WS
55 nobody
1000 ♀604 WS
05 ♀711 WS
10 nobody
15 ♀604 ♂173 WS
20 ♂173 WS
25 ♀604 E
30 all 3 WS

	1st	2nd
♂173	III	III
♀604	III	III
♀711	III	III
0	21 1/2 hr	20 1/2 hr

20.5/hr

Melanerpes formicivorusLower HaystackHastings Reservation8 Jan

Start 0945. Granary census on back. $\sqrt{588 + 589}$ have not been seen here since October. 1145, end watch. $\sigma^{\uparrow} 307$ ^{or R} $\sigma^{\uparrow} 461$
 Metal/LBlue-wht $\text{♀} 515$ ^{DBrn/Yellow} $\text{♀} 587$ ^{Metal /} ^{wht-BLK/BPnk Black}

all seen very well indeed. Looks bad for $\sqrt{588 + 589}$, although I first thought I got a very quick glimpse of $\sigma^{\uparrow} 588$. In retrospect, I was probably mistaken. Subsequently, I saw the 4 birds several times on different occasions.

Birds aren't coming to the granary much. All 4 were seen at one time or the other pounding on the bark of the "Black Bark" Blue Oak on the side of far tortuga facing the granary. It seemed like they were refurbishing the sap holes, as opposed to actually drinking sap.

10 Feb

Start 1310. I believe I flush four birds out at the start. Granary census on back. $\text{♀} 515$ ^{DBrn/Yellow}, $\sigma^{\uparrow} 307$ ^{Orange R}, $\sigma^{\uparrow} 461$ ^{DBlue-wht/LBlue white} all show up at granary. Later, $\text{♀} 587$ ^{wht-BLK/BPnk-BLK}. 1400, $\sigma^{\uparrow} 307$ sapsucking from Black Bark Blue oak. Complete census, end 1515

$\text{♀} 515$ doing a lot of granary work. Perhaps drilling holes?
 (5 minor more)

Long periods of pecking at the same storage hole.

17 ~~16~~ March

Start 1055. granary census on back. Noon, $\text{♀} 587$, $\sigma^{\uparrow} 307$, $\sigma^{\uparrow} 461$ fly across to dry tortuga, drink from a rain well in a Blue Oak 100-120 m NW of granary. $\sigma^{\uparrow} 307$ then flies to Sap tree (see 8 Jan) $\text{♀} 515$ did not fly off to drink with others, remained in granary. 1207, all 4 birds in sap tree. 1255 end, $\sigma^{\uparrow} 307$, $\sigma^{\uparrow} 461$, $\text{♀} 515$, $\text{♀} 587$ all seen well.

$\text{♀} 515$ showing some interest in the double entrance granary hole. ♀ No following of ♀ yet, either

8 Jan 1981 Low Hay granary census

0945	nobody	1050	nobody
0950	"	1055	"
0955	"	1100	♂307 ♂461 ♀515 ♀587
1000	"	1105	" " " "
1005	"	1110	" " " "
1010	"	1115	♀515
1015	"	1120	nobody
1020	"	1125	"
1025	"	1130	"
1030	♀515 ♀587 ♂588	1135	"
1035	nobody	1140	♂307 ♂461 ♀587
1040	"	1145	♂461 ♀515 ♀587 ♂307
1045	"		

$\frac{7}{25}$ attendance
(poor)

10 Feb 1981 Low Hay granary census

1315	nobody *	1415	♀515 ♂461
1320	"	1420	~~mmmm~~ ♂461 ♂307
1325	"	1425	nobody
1330	"	1430	♀515
1335	♂307 ♀515	1435	"
1340	♂307 ♀515 ♂461	1440	"
1345	" " "	1445	"
1350	♂307 ♀515 ♂461 ♀587	1450	♀515 ♂461 ~~mmmm~~ ♂307
1355	" " " "	1455	♀515 ♀587
1400	" " " "	1500	♀515 ♀587 ♂307
1405	♀515 only	1505	" " " "
1410	"	1510	♀515 ♀587 ♂307 ♂461
		1515	" " " "

17 March 1981 Low Hay granary census

1055 nobody
1100 nobody
1105 "
1110 "
1115 "
1120 "
1125 "
1130 "
1135 "
1140 "
1145 ♂461
1150 ♂461 ♀515
1155 ♂461 ♀515 ♀587

1200 ♂307 ♂461 ♀515 ♀587
1205 ♀515
1210 nobody (all 4 birds in sap tree)
1215 " "
1220 " "
1225 ♀515
1230 ♀515
1235 ♀515
1240 ♂461 ♀515
1245 ♂307 ♀515 ♂461
1250 " " "
1255 " " "

Melanerpes FormicivorusLow Hay

4 April Start 1345. 1405, ♀523 DBlue / W-DBlue from S Hill sneaks into the granary while ♂307, ♂461, ♀587 sapsucking. Immediately upon landing in the granary, all three residents fly over, and a ♀ ark (crest raise) chases ^{♀523} ~~her~~ out. I have yet to see ♀515.

Interesting how quickly the residents responded to ♀523. They were in the sap tree 80 meters N of the granary. Could they have recognized ♀523 as an intruder that quickly?

¹⁵⁰⁴ ~~1504~~ ♀523 is back, this time flycatching from the tree from where I watch, the Valley Oak 75m east & uphill of the granary. After a few flycatch sorties, ♀587 flies up ^{from the granary} and gives a mild chase. ♂307 was in the ~~tree~~ granary too, but he did nothing. ♀523 flies to the top of Haystack Hill, then garricks at 1506. garricks again at 1508, from very top of haystack. ♀587 remain perched in the tree near me.

♀515 is undoubtedly gone, disappeared on 25 March ± 1 week (last seen 17 March).

1512 Revolution! ♀587 chases another bird from granary, ♀523 joins. Yesirree, ♀509 from Gazebo ^{m / LGrn - DGrn} LGrn - DGrn / Yellow here too, perched for a long time in the tree near me, with ♂461 even ♀530. Some still garricks on top, (♀523 likely?). Also saw an UB ♀ I think chased by ♀309, but not positive. 1540, ♂461, ♀509 in tree near me, ♀587, ♂307 in granary, and ♀523 (presumed) on top of Haystack. ♀587 very friendly, making a lot to 307, even on a flycatch sortie

1981

R.L. Mumme

3

Melanerpes formicivorusLow HayLow Hay
(4 April)

♀509 doing some drumming. Saw ♀587 drum once in the granary. 1545, a real lull at the moment. 1555, 2 inexplicable, ♂461 starts to tussle with ♀509, after sitting "with" her for quite some time. This attracted ♀587 from the granary, who gave violent chase. Then, all resident birds in the granary, wakaing, etc. ♀587 open wings, tail lifts as well. Intruders seem to have been temporarily routed from the scene. End 1600. Score Round 1 to ♀587.

5 April

1035, Revolution in full swing. ♀523, ♀509, 3 NB♀♀ here. 2 NB♀ seem to be cooperating. ♀523 is peripheral (broken tree SE of granary) as is ♀509 (2° granary). At least 4 & perhaps 5 ♀ NB, one peripheral on the utility pole. Peripheral birds (♀523, ♀ NB) do all the garricking. One big "to the ground tussle" I try to run up to capture them, but they take off just in time. On the ground ~~several~~ about 1 min. 1118, ♀587 does all the chasing in the granary. In the 2° granary, ♀509 has a little sidechon with a ♀ NB. ♂307 does a bit of chasing, especially it seems when ♀♀ on storage limbs. The 2 NB♀♀ that are cooperating seem to chase peripheral ♀♀, but themselves are being chased by 1300, a long lull to set up mistnets, ♀587 captured. ♀523, ♀509 still around, but doesn't seem like a pair of cooperating females anymore. 1400, Pause after catching ♀523 in the net. 1500, 1600 Caught 2 NB♀♀, ~~and~~ Before catching the second one (♀642), we had seen mountings between

5 April 1981 Low Hay PS

3 resident, 5-6 intruders

1 min sample

	<u>wakas</u>	<u>garricks</u>	<u>Drums</u>	<u>chases</u>	<u>urks</u>
① 1105	75	4	2		0
② 1110	35	7	2		0
③ 1112	65	6	3		0
④ 1117				12	
⑤ 1120	110	0	0		4
⑥ 1125				4	
⑦ 1304	<u>54</u>	0	2	~~0~~	3
⑧ 1307				7	
⑨ 1320	34	0	1		0
⑩ 1325	340			9	
				~~9~~	
				9	
⑪ 1330				~~8~~	
⑫ 1335				8	
⑬ 1405	45	0	0		0
⑭ 1405				3	

Sum of First 5 minutes

(340) (11) (9) (43) (7)
 wakas garricks drums chases urks
 (conservative, overlapping calls)
 counted as one

5 min, 3 residents, 5-6 intruders,

sampled between 1100 - 1300, 5 April 1981

Low Hay

1981

R.L. Munne

4

Melanerpes formicivorusLow Hay

(5 April) ♂307 and a ♀NB. That all ceased after catching ♀642. However, she disappeared after release at 1550, and the revolution reverts to confusion. ♀587 still seems to be holding her own, but there are still 2 NB♀♀, ♀523, + ♀509 around. It looked like the ♀ that was mounting with the ♂♂ was ultimately ♀642. Hopefully, she will return tomorrow.

So at least 6 ♀ here participating

6 April 1500 - After an hour of trying to take pictures, then a break to process ♀643, I now try to figure out what's going on. Still very active.

♀524 (still) chased around in granary by ♂307, ♂461.

1508, ♂307 mounts ♀524 in granary. ♀524 not being

again later

chased by anybody. 1515, ♀524 looks in charge, chasing everyone else. Where is ♀587? I really must

have missed something. Walter told me at 1240 that she was still in control of the granary. ♀601 from

gate garricks from watch tree. While I was taking photos or fooling with a bird in the net, ♀524 must have

taken charge. She was chasing ♀♀ all the way over to Far Tortuga. Things really calming down now.

1550, ♀587 is still with us, sapsucking and generally hanging out. At 1610 she flies S along the edge of the wooded canyon, stops briefly in the live-oak-encased valley, Oak 50m W of the granary, then continued on to the supplementary area S of the granary. ♀524 must be completely in charge. ♀587 was doing a bit of "wakaing to herself"

Melanerpes FormicivorusLow Hay

(6 April) like ♀522 did at Plaque last year, but not nearly as much. While ♀587 was in the sap tree, ♂307 + ♂461 flew over. Friendly greeting, no aggression whatsoever. However, ♀587 is most certainly avoiding the granary. It's easy to see why; at around 1515, Occasional stray ♀♀ that had been peripherally garrick-ing, would attempt to fly to the granary. They never had a chance, as ♀524 is a demon. She would pick up the intruders before they got within 50 ~~meters~~ meters of the granary, and she (with help from ♂461 + ♂307) would chase them incredible distances; Once I saw a victim pursued all the way to far Tortuga, another east to the crest of the hill 1700, it certainly seems to be all over. ♂461, ♂307, in ♀524 in the granary, acting extremely chummy. Only one ♀NB intruder the last hour, rapidly vanquished. ♂♂ no longer chasing her. ♀587 no longer around.

is it ♂♂ or
♀524 that
moved the tide
(or both?) →

Questions: ① Exactly what happened to reduce ♀587 to the periphery? When I arrived at 1245, Walter said she was still in command. I took photos until 1415, Then a bird in the net, and by 1500 ♀524 was in charge, ♀587 was gone. Whatever happened, it happened fast.

Point: ① ♀523 Did not assist in ♀524's victory. Although Walter saw her periph^{er}ally earlier today, and I may have seen her in the 2° area (south) at 1500, she hasn't been around at all since. Too bad! Will she join later?
1710, ♀587 back in the sap tree. End 1710.

Melanerpes formicivorusLow Hay7 April

Well, it's not over yet! I see 10 birds flying around when I arrive. Well, ♂492 + ♂493 camped out in the secondary granary, 0720. So is ♀601 of Gate ♀587 back in the 1° granary, but not doing any chasing.

Hot Damn! All 4 SH ♀♀ are in the 1° granary, chasing other birds. ♂461 right next to ♀523, ♀604, doesn't chase them. ♀623 from 1500 here, being chased in granary. Also ♂562, 1800 in 2° granary. 0745, the SHill ♀♀ have a firm grip on the N side of the 1° granary. The south side seems to be the domain of ♀587, ♀623, ♀NB. The secondary granary has ♂♂492+493, ♀601, and ♂562 plus a ♂NB lurking about.

0750, ♀587 really whipping up on ♀623 in the S side of the granary. 0803, a new face, ♀565 from 1800, being buffeted around a bit in the N side of the granary. ♀509 seen today as well.

809, ♀509 chased by ♂307, ♀509 seemed to be having the better of a SHill ♀. ♀509 seems to be chasing somebody in the right side of the granary. 0822, ♂492 + ♂493 seem to have retired. 0825, Not so, ♂492 in the top of the 1° granary, now. 0830, 2 ♀NB, a coalitive perhaps, peripheral in the broken tree. No aggression.

0840, ^{imm}Cooper's Hawk flies into granary. Complete halt of action.

Melanerpes formicivorusLow Hay

(7 April)

0900, Looks like the SH contingent (all 4!) starting to gain complete control of the 1° granary. ♂♂ have been helping. By no means secure yet, but getting there.

♂492, ♂493, ♀601 still in control of 2° granary.

♀587 not around, I may have seen her chased toward Sap tree by SH ♀♀.

0950 Looking good, the SH 4 are mopping up scattered pockets of resistance. ♂307, ♂461 also seem to be taking part, ♂367 chases ♂562 out of 2° area.

♀601 still seems to have a claim on the 2° granary, but ♂♂492 & 493 seem to be retiring to the ravine. Haven't seen ♀587 in a long time.

1000, ♀509 roundly thrashed by all 4 ♀♀, forced to retire to the broken tree. ♂461 gaining control of 2° granary, although ♀601 is still camped there.

1008 ♀623 also brutally chased into broken tree.

1010, Neat, ♂ orange/orange (♂579 from Rd 1)

flies in, ♀♀ organize to chase, come within a few inches of him, "realize" he's a ♂, give karrits,

and ♂307 comes over to whup up on him, chasing him out.

1013, ♂461 chases ♂492 out of 2° granary.

1020, 05ay, ♂173 from Hay Blom in the 2° granary, being chased around by ♂492. 1025 Another fantastic chase, 2 birds sending a third over the top of Haystack -

1040. ♀601 still in control of 2° granary, but 4 SH ♀♀ are in complete control of the 1° granary. ♂♂ friendly to both, all ♀♀.

Melanerpes formicivorusLow Hay(7 April)

Problems remaining are ① 2° granary, with ♀ 601 well established, and ♂ 492 weakly established. ♂ 461 makes occasional forays over there to chase ♂ 492, and sometime the ♀. I'm sure they'll gain control soon. ② Again where is ♀ 587? I suspect peripheral again, but I'll have to look later.

All ♀♀ look well coordinated in defense now. The occasional intruder is greeted by 3 or 4 flying "residents" now. Lots of ~~or~~ open-wing wakes by the 4 to the ♂♂ + among themselves.

1100, now a ♀ NB on the 2° granary as well. Some SH ♀♀ tried to chase them out, without success.

1500 ♂♂ are in the sap tree. It's not over yet!

But 5 SH ♀♀ have complete control of the 1° granary.

End 1100. ♂ 307 mounts ♀ 523 in 1° granary; ♂ 461, and a ♀ in a big scuffle with ♀ 601 in the 2° granary. Perhaps that will be cleared up soon as well.

8 April

Thing aint over yet 0830, lots of activity, still.

Little change since yesterday: ① 1° granary in complete control of LH ♂♂ + SH ♀♀. ② 2° granary has ♀ 601, ♂ 492 + ♂ 493, plus an unbanded ♀. ③ Only new thing, a bit of commotion in the upper Haystack (2°) area.

♀ 601 ♂♂ 492 + 493 maybe defending the "watch tree" although at 0855 ♂ 307 was in it as well. The "LH 6" also are defending the "broken tree". 0915, a ♂ NB with a ♀ in the 2° area. I even saw a mounting, but that seems quite peripheral. 0930, a ♀ NB in the sap tree. No sign of ♀ 587.

Melanerpes formicivorusLow Hay

(8 April)

The persistence of the 1500 ♂♂ and ♀601 in the 2° granary raises the possibility that they could actually bud off and defend that area. Awfully close quarters, but stranger things have happened, I suppose. At the moment, ♂492 + ♀601 have access to the sap tree (both sapsuck briefly, along with ♀NB, at 0935.

SPK-BK/M

0945, back at the 2° area, I find ♀587

Another bird (the unbanded ♂) present as well. Were they the birds I saw mounting over here.

1000, a new face in the 2° area, then the watch tree.
 ♀633 ^{LPK-DBine / LPK-DBine} _{" / Metal} from Warp 5, of all places.

1025, ♀623 in the watch tree, too. End 1030. Will the 1500 ♂♂ and ♀601 hang on? Will the Low Hay 6 ever expand their activities outward from the 1° granary? There in tomorrow.

15 April

Well, 1 week later, very different. Nobody around as I arrive at 1100. ♂307, ♂461, ♀523, ♀524, ♀604 all seen well & repeatedly. But no evidence of ♀602.

Also saw ♂461 mildly chase ♀604 3 times in the 1° granary, and ♀524 was chase once. Also bird calling from the 2° area. Still some sapsucking action

20 April

Start 1320. 1 ♀ in the sap tree, 1 in granary as I arrive.

latter flies to UHay area before I see birds. Windy.

1430, ♂461, ♂307, ♀523, ♀324 ^{Metal} seen well. More evidence of ♂461 chasing some ♀, though he seems on good terms with ♀523. No looking at any holes, yet. A 3rd ♀, Probably ~~Q609~~ ^{Q609} was also ~~seen~~ around. No evidence of ♀602 -- again! I'll bet she's gone.

1981

R.L. Mumme

10

Melanerpes formicivorusLower Haystack22 April

Start 1320. ♀604 ^{Red-wht/BLK} " " in the 2° (Upper Haystack) area, garricking. Then she flies to the "watch" tree, karritts 5-10 times. Definitely not looking great for her. Mary saw her back home at School Hill yesterday. 2 other birds (1 a ♀) in the granary as I arrived, flew off to the 2° area

1410, wandering through the 2°, I stumble into ♀602 ^{BLK/white} ^{BLK-wht/m} karritting from top of the PO-covered Blue Oak near the 2 Valley Oak hole trees + the sap trees (15 meters from both)

1445, In the 1° granary for the last 1/2 hr have been ♂307, ♂461, ♀523, + ♀524. All seem pretty friendly. ♀♀602 + 604, however, are definitely peripheral. Earlier I heard urkks, chatters, add and general chasing sound from Far Tortuga, once after ♀602 had flown over that direction. No interest in any holes, as far as I could tell. Incidentally, the "Tape Hole" in the Valley Oak in the 2° area, has fallen apart.

23 April

♀587, of all birds, seen at Gate (see Gate notes).

24 April

See SHill notes. ♀602 + ♀604 "back home" at 1730. Also see Walter's notes.

25 April

Start from hide near 2° g 0630. Walter watched here the last two days, when the birds showed interest in the 2 granary holes, plus the Blue Oak hole. 0741, ♀524 enters 1979 nest hole briefly (<10 seconds). Doesn't go down. Earlier, I saw her peek into the 1980 nest hole twice. Never entered. 0800, ♀524, another long look into the 1980 hole. 0817, Birds off on Far Tortuga. Going to look. Back at 0900, ♀604 karritting from watch tree (VO 50m uphill of granary) after being back at SHill last night. Nothing much seen

1981

R. L. Mumme

11

Melanerpes formicivorusLow Hay

(25 April) on Far Tortuga, other than a lot of Black Oak trees I didn't know existed on Haystack. All on the far, north-facing side of F.T. Also, I'm getting the impression that ♂461 is following ♀524, and ♂307 is associating with ♀523. Interesting.

28 April

Start watch from blind 0610. Garricks coming fast & furious from the "watch" tree. ^(♀604?) It ♀NB here too, chased ♂, ♀523, ♀524. 0645, A lot of activity at the Blue Oak hole, I think some birds entered. At the same time, there was a big chase I think involving the garricking bird (♀604?) all 4 residents seemed to take part in the chase. 0650, now garrick coming from well back in the 2° area. Residents all seem to be over there as well.

0730 More action in the Blue Oak hole. ♀524 enters several times. ♂307 enters at least once. Never stays long.

{ 0845, ♂307 chased the garricking bird all the way over the top of Haystack. Suspect ♂♂ largely the reason ♀602 + ♀604 didn't stay. Earlier, I thought I saw ♀523 chase the garricker, but I was not sure. 0855 end going to check nests.

1000. Check both the 1980 nest and the Blue Oak hole. nothing. The Blue Oak hole does not yet have a good bottom.

Earlier, I believe I saw ♂461 pecking at ♀523 in the granary. Hope they can patch that up.

29 April

Start 0600 from 2° area, watching holes here 0610, ♀604 Red-wht/Blk here, garricking dp astorm (one every 2-3

Melanerpes formicivorusLow Hay

(29 April) then a big bout of garricks. 0625, still at it. Moving around the 2° area, now over in the watch tree, where F heard her yesterday. 0640, ♂307 over here, chasing a bird (I suspect ♀604, as yesterday) to the extreme end of the old Upper-Haystack area. 0730, No garricks since then. ♂307 must have done the trick.

0810, ♀524 looks into the "roost hole" (lower of the 2 valley oaks with holes; hole faces south), does not enter.

Also, more garricks from the top of the 2° knoll.

End 0830, no more action. Ash-throated Flycatchers looked into the distal hole in the upper Valley Oak, but -- wait a minute. 0840, ♀604 ^{Red-wh+Blk} " " " after pecking into the roost hole a couple of times, She enters at 0845, Stays until 0850. Still garricks (even a few times while in hole). Enters briefly again when ♂307 ♀524 fly to tree. 0855, all 5 birds flycatching around the knoll. No chasing that I can see. 0900, whoops, a bird (I think ♀604) is chased from the roost hole area. End 0910. 4 residents flycatching here, ♀604 garricking off by herself.

30 April Start 0610. Garricks from the watch tree, no doubt ♀604 again. 0610, ♀604 looks into Blue Oak hole, garricks several times while looking in.

0750, ♀524 looks in the 1980 nest hole for a minute, does not enter. End 0840. Both ♀♀ have been to the 1980 nest a few times, looking in. Also a few peeks in the 1979 nest by ♂461 + another bird. 3-4 times birds flew off toward the roost hole, giving me cause for concern about that hole.

Melanerpes formicivorusLow Hay

(30 April) 0850, ♀424 looks into Blue Oak hole briefly as I'm about to leave.

1 May

0600, a ♀ in the hole (1980) as I arrive! Uh-Oh.

Believe it was ♀523, as I think I saw ♀524 in the broken tree with the other group members. At any rate, the bird looking out had 2 small (double) mustaches, and a small white flag at the right corner of her forehead. I doubt eggs were laid, but you never know. 0615, a bird here karriting + garriking from the watch tree must be ♀604 again.

0830 checked the '80 hole, nothing. ♀423 + ♀424 both looked into it while I was watching, but nobody entered. ♂307 looked at the '79 nest, but did not enter. No action at all in the Blue Oak hole. However, I saw lots of flights over toward the "roost hole", so I think I ought to check that out.

Couple of points ① Birds seem to be pairing up. ♂461 is definitely following ♀524, and I think ♂307 is keeping tabs on ♀523. Will have to check that out later. ② Still some aggressiveness displayed toward ♀523 by ♂461. Saw 2 instances, once over acorns. The second instance was at 0830, ♀524 looking into the 80 nest, ♀523 flies over, open-wing wakas, ♂461 then comes over + pecks hard at ♀523 ~ 5 times, driving her away from the hole. ♂307 also came over, but I'm not sure what happened after that. ③ ♀604 (presumed) is still around the periphery, garriking etc,



Melanerpes formicivorusLow Hay2 May

Start from hide 0545 Mary watching simultaneously at
 the roost hole 0620, ♀578 ^m ^{wht - Lgreen} Yellow/wht - Lgreen ~~intruding~~
 intruding here from Road 1, drumming in the 2^o
 granary. 0630 Yikes, Mary tells me that
 ♀523 entered the roost hole and stayed in about 2 minutes
 0700 ♂562 ^{wht - Lgreen} " " looks into the Blue Oak
 hole. ♂307 Flies over. All kinds of intruder activity,
 no doubt because of ♀604 constant garricking.

0810, Nothing has happened here. Nobody's looked
 at any of the 3 likely holes. ^{checked roost tree, couldn't} See bottom of hole.

3 May

Start 0⁵50. Garricks from the watch tree

0629 ♀523 enters 80 hole. Leaves 0640,
 Check hole. Hot damn! One egg

most certainly laid 26.4 x 20.3 ♀523

BBblue - wht DBM. Back in hide 0650

0830, ♀524 has looked in 3 times since 0650,
 but has not entered. 0850, Relieved by Walter.

Starting watch 1800, after Walter reports ♀523's
 egg thrown out by ♂307 (!!!). Hard to see anything
 in the afternoon sun. At roosting, it looked like 3 birds
 were really involved in a tussle of mountings, etc, with
 a 4th bird (♀?) left out nearby.

4 May

Start watch 0545. Pre-esting on back. Nobody laid today,
 so yesterday just a false start. ♂461 a hot follower of
 ♀524. ♂307 seems to be consorting weakly with ♀523.
 Only highlight was a ferocious chase involving 3 birds (♀604,
 who was garricking as usual here, perhaps).

3 May 1981 Low Hay pre-esting

1805 ♀524 ♂461 g
 1810 " " " NI
 1815 " " " NI
 1820 " " " NI
 1825 " " " NI
 1830 all 4 g
 1835 ?
 1840 ♂461, ♀ g

4 May 1981 Low-Hay pre-esting

	F	FTF	MAF
0545 all 4 Uhay knoll	♂461 IIII		I
0550 " " NI	+	(0)	(1)
0555 " " NI	♀524 (7)	(0)	(1)
0600 " " NI			
0605 all 4 g		I	
0610 " NI	♂461 (0)	(1)	(1)
0615 " NI	+	(1)	(1)
0620 " NI	♀523		I
0625 ?			
0630 ?			
0635 ?	♂307 (0)	(1)	(0)
0640 ♂461 ♀524 g ♂307 watch tree ♀523 elsewhere	+		
0645 ♂461 ♀524 broken tree	♀524		
0650 ?			
0655 ♂461 ♀524 g ♀523 ♂307 Uhay knoll	♂307 III	I	
0700 " " NI	+	(3)	(1)
0705 ♂461 ♀524 g NI			(0)
0710 all 4 g	♀523		
0715 " NI			
0720 ♂461 ♀524 watch ♂307 Uhay knoll ♀523 broken			
0725 all 4 knoll			
0730 ♂461 ♀524 knoll			
0735 ?			
0740 ♀523 g others knoll			
0745 all 4 g			
0750 " NI			
0755 " NI			
0800 ?			
0805 ?			
0810 all 4 Tortuga			
0815 all 4 g			
0820 end watch			

0545 - 0815

150 min

Melanerpes formicivorusLow Hay8 May

Start watch from hide ~~at~~ 0600 0727, ♀524 enters
 nest hole. 0731 she leaves. ♀524 appeared to
 have a large abdominal bulge. Mary reported that
 she entered the roost hole at 0615. In again
~~at~~ 0746, out by 0749.

0800, I check 1980 hole. ~~The~~ Empty, so ♀524
 did not lay. However, at 0845 I finally get up to the
 roost hole and find 1 runt egg, 19.3 x 15.5 mm.
 Unfortunately, I crack the shell trying to get it out of
 that very, very deep hole. A very bizarre runt, as the air
 cell was located in the middle of the egg, rather than at
 the blunt end. That was where I cracked the egg, anyway.
 Actually, I'm not altogether sure I cracked it, since it
 seemed like a puncture wound through the air cell rather
 than a crush. Anyway, trying to get the egg back in
 the hole, I totally destroy it. Interestingly, this
 particular runt had a complete, normal looking yolk.
 It had just the thinnest layer of albumen to go along
 with it. I go back down the hill, inject plaster
 into our runt in the collection, bring it up and place
 it in the "nest" The bottom of the roost hole
 is very strange. No good wood chips, but a good bit
 of gunked-together sawdust. Very damp. Very surprising
 that ♀524 would lay her egg there. Walter watches hole 1030

Points ① ♀524 may have been "forced" to dump
 her egg off there. I was unable to get the movie
 camera working, and was fooling around with it until 0610

Melanerpes formicivorusLow Hay(8 May)

or so. And why would she return back and enter the 1980 hole twice later if she had really wanted to lay there?

Nobody (except ♀604) has shown the slightest interest in that hole in the last few days. ^{Did my disturbance at the granary force her to lay there?}

② A remote possibility is that ♀604 laid the egg yesterday (see Byron's notes), since we didn't check the hole then. Not likely

③ I wonder if ♀523 is ready to lay yet? She has not looked at a hole in the last couple of days (to my knowledge). This may prove to be another false start. Mary said that ♀524 was down in the roost hole for only 15 seconds. It really sounds like she was just "unloading a mistake." We shall see. I won't be surprised if nobody lays tomorrow.

Walter was going to watch the roost hole to determine the fate of the runt egg (at least, he would watch for an hour or so).

④ I also saw a bird near the Blue Oak hole, so we shouldn't ignore that one either.

9 May

Start watch for "Roost hole" 0545. 0720, ♀604 (here garricking harriting, + drumming as usual) and ♂562 ^{Grn-wht / Grn-wht} of 1800 have looked in, but that's all. Walter tells me ♀524 has laid in the 1980 hole 0800. Checked roost hole. Runt egg still there! not thrown out.

Starting 1315. 1408 ♀524, then ♂461 enter. Both leave 1411.

Again 1820. Checked hole, still 1 egg. Nobody roosted in the hole

Melanerpes formicivorusLow Hay

10 May Start watching 80 hole at 0535 (actually 0435).

0526 ♀524, then ♂461 enter hole, both leave 0528

0550 after checking hole, still the one marked egg, ♀524 did not lay at 0526.

0641, ♂582, the now homeless ♂ from Blome-one (BPAK/naave) intruding here, chased out by ♂461. No doubt attracted by ♀604's garricking, etc.

0740, a huge chase, involving 3 chasers (♂307 in the lead) and 1 chasee (♀604, I would bet!) ~~At~~ ♂307 took the lead in the chasing.

0800, Back after checking the roost hole. Damn it, the rust egg, still there, but somebody laid today.

That egg marked #1, measured (26.0 x 21.1 mm)

I bet it was laid by ♀524, who was disturbed enough by Walker + I stumbling around in the granary early to go dump her egg elsewhere. The only time I saw birds in the area of the roost hole was between 0550 and 0610, so I'd bet laying occurred then. I left the rope ladder up at that hole in an attempt to discourage birds from going into that hole, since we won't be watching it.

1000 ♀565 from 1800 here.

¹¹¹⁵
~~1115~~ Bagging it. Lots of action in the 80 nest hole, but birds are being very difficult to watch.

Yeah! → Janet reports ♀524's egg thrown out around noon by ♀523! See her notes. Suspected to have been eaten. Roosting, I take the rope ladder down from the roost hole (today's egg still there) Walter

10 May 1981 Low Hay egg-laying

			F	FTE	MAF
0615	all 4 g				
0620	"	1 NF			
0625	"	1 NI	♂461		⊙
0630	"	1 NI	♀524	⊙	⊙
0635	"	1 NI			
0640	"	1 NI	♂461	1	
0645	?		♀523	⊙	⊙
0650					
			♂307	⊙	1
			♀524	⊙	⊙
0720	♀524 ♂461 g	1 NF			
0725	"	1 NI	♂307		1
0730	"	1 NI	♀523	⊙	⊙
0735	"	1 NI			
0740	all ♂461 ♀523 ♀524 g ♂307 chasing intruders				
0745	all 4 g				
0750	?				

0910	♂461 ♀524 g	0615 - 0750	45 min
0915	all 4 broken tree	0910 - 0930	<u>20 min</u>
0920	?		
0925	all 4 g		115 min
0930			
1200 quit			

Melanerpes formicivorusLow Hay

(10 May) reports 6 (!) birds roosted in the hole. One of the two extras was most likely ♀604, but the other? ♀587? ♀602?

11 May

Start watch 0445 at roost hole. Birds already have left. 0615, moved to watch granary. Behavior data on back. 0720, another very extended chase, involving first ♂307 + ♂461, then later just ♂307, and an intruder that I guessed was ♀604. Very long, persistent chase, over the top of Haystack, on the knoll area, etc. Went on for about 5 minutes.

Holes checked 1100-1200. Nothing in the Blue Oak hole, where I saw some sort of activity earlier; and in the roost hole there remained the one egg laid by ♀524 yesterday. Ending 1200 Janet watching ⁸⁰ hole in granary, where ♀524 laid this morning (see Walter's notes).

Walked back up here, relieving Walter at 1705, watching 1980 nest hole with tossable egg.

1743, ♀524 enters; ♂461 looks in, ♀524 leaves 1745

1835 ♀524 enters. ♀523 then enters, ♂461

dominance

→

looks in, at entrance. ♂307 flies to hole, both ♂♂ side by side at entrance. ♂307 gives ♂461 a gentle but definite peck to the side of ♂461's head. ♂461 turned head slightly. ♂307 flies off. 1836, ♂461 enters, leaves 1837, then ♀524 leaves, ♀523 heads out. Does not go back down, leaves

11 May 1981 Low Hay egg-laying

	F	FTF	MAF
0615 all 4 g			
0620 ♂461 ♀524 g ♂307 ♀523 far tortl	♂461 IIII (8) ♀524 III	(0)	I (1)
0640 all 4 g			
0645 all 4 g NI			
0650 ♂307 ♀523 g ♂461 ♀524 broken tree	♂461 (0) ♀523	III (3)	IIII (5)
0655 all g except ♂307			
0700 all 4 g NI			
0705 ♂307 ♀523 broken tree ♂461 ♀524 g	♂307 (0) ♀524	IIII (4)	IIII (5)
0710 ?			
0715 ?			
0720 ?			
0725 all g except ♂307, chasing intruder, Uhay knoll.	♂307 IIII (4) ♀523	I (1)	III (3)
0730 ?			
0735 ♂461 ♀524 Uhay granary ♂307 ♀523 g	both ♀♀ ♂461 I		
0750 all 4 g			
0755 " NI			
0800 " NI			
0805 ♂461 ♀524 g ♂307 ♀523 Uhay knoll			
0810 ♂461 ♀524 g			
0815 all g except ♂307			
0820 all 4 g			
0825 " NI			
0830 " "			
0835 " "			
0840 ? ?			
0845 all 4 g			
0915 all 4 Blue Oak			
0920 ?			
0925 all 4 g			
0930 " NI			
0935			
0940			
0945			
0950 all g except ♀523, knoll			
0955			
1035 all 4 g			
1040 ♂461 ♀524 g ♂307 ♀523 knoll			
nest checks			
1200 end			

0615 - 1045

270 min

Melanerpes formicivorusLower Haystack

(11 May) 10 seconds later without going back down.

1900, a rude shock after checking hole and turning off movie camera: Egg is gone! And nobody saw it thrown out! Chief suspect is Byron (see his notes), but it is possible that Walter, Janet or I blew it. Seems like it would have had to have been ♀ 523 that threw the egg out, but we may never know. End 1900.

12 May Start 0505, watching granary for behavior.

0552, ♀ 523 flies from broken tree to Blue Oak, and is followed by ♂ 307. It looks like ♀ 523 entered the Blue Oak hole at this time, with ♂ 307 in attendance. At 0600, ♀ 523 out of hole, scaling moss off limbs of Blue Oak.

0745, ♀ 523 + ♂ 307 back in the Blue Oak area, ♀ 523 really ~~is~~ ripping apart the moss on the main trunk of that tree. Seems to be looking for (and finding) insects underneath the moss mat.

0800, ♀ 523 tosses egg laid by ♀ 524 earlier that day in the 1980 nest hole (see Walter's notes). She carries it to back branch of granary, sets it down intact on a near horizontal section of a mostly vertical limb. Flies off (perhaps scared away by Walter's and my ~~scrambling~~ yelling to each other. Anyway, Walter then locates the egg in the granary, sets up his camera and the hide in a position on the S side of the granary.

12 May 1981 Low Hay egg-laying behavior

		F	FTF	MAF
0535	all 4 g			
0540	" NI	♂461	III	
0545	" "	♀524	(5)	(0)
0550	all 4 brogen treea			
0555	♂307 ♀523 BlueOak ♂461 ♀524 broken tree			
0600	♂307 ♀523 BlueOak ♂461 ♀524 g	♂461	(0)	II
0605	" " NI	♀523	(2)	(3)
0610	all 4 g			
0615	" NI	♂307		II
0620	" NI	♀524	(0)	(2)
0625	" NI			
0630	" NI	♂307	II	(0)
0635	" NI	♀523	(2)	(0)
0640	all 4 Blue Oak	both ♂♂		
0645	all 4 g	both ♀♀		
0650	♂307 ♀523 BlueOak ♂461 ♀524			
0655	all 4 Blue Oak			
0700	all 4 Blue Oak area NI			
0705	all 4 g			
0710	all 4 g NI			
0715	" "			
0720	" "			
0725	" "			
0730	" "			
0735	" "			
0740	all 4 g I			
0745	♂307 ♀523 Blue Oak ♂461 ♀524 g			
0750	" " NI			
0755	" ?			
	Egg-tossed			

0535 - 0755

140 min

Melanerpes formicivorusLow Hay

(12 May)

At 0830, I checked the Blue Oak hole, and found it empty. So either ♀523 did not lay in that hole at 0600, or she did and the egg was already thrown out. (probably, if so, around 0650, 0640, when all 4 birds were in the Blue Oak area. We will have to watch that hole closely tomorrow morning.

0900 starting watch of ♀524's intact egg sitting on branch of W side of granary (placed there by ♀523). Trying to get photos of egg-eating

0920.00 ♀524 flies to egg. punctures it with her bill (her own egg!), begins to suck up albumen, perhaps yolk as well. 0924.00, she flies off. Lots of albumen sucking + lapping

0931.45 ♂461 eats egg, sucking albumen briefly. ~~alt~~ he leaves 0932.00

0932.20 ♀523 (the tosser) at the egg. White (albumen) drooling from her bill clearly visible heads down, bill into egg, for about 1-2 seconds, then head lifted, some tongue lapping movements, then return to the egg 0934.10, she leaves.

0938.45. ♀524 back at egg. 2 inches away is ♀523 (see photos) ^{♀524 on right, ♀523 spreading o. left} no aggression. For the first time, apparent that ♀524 is eating a few bits of shell. 0940, ♀524 picks up a large fragment of shell, latches up the branch past ♀523, ~~•~~ eats the remainder of the shell

→
♀524
4 min
egg-eating.

♂461
15 seconds
egg eating

♀523
1:50
of egg-eating

♀524
1:15
of egg
eating,
with ♀523
nearby

Melanerpes formicivorusLow Hay(12 May)

0940.15, ♀523 moves to spot where the egg had been, picks up a large shell fragment, flies off toward the center of the granary.

Hopefully I got a great picture of ♀523 with the egg-shell fragment held upright in her bill

0941.20 Egg totally demolished. I climb up tree, No trace of egg whatsoever.

..... ♀524 definitely ate the large chunk of shell she carried off. Don't know what became of the piece ♀523 carried away, but I presume she ate that.

1100 Anticlimatically, I check the roost hole. Egg layed by ♀524 ~~stayed~~ 10 May still there.

13 May

Start watching Blue Oak hole 0530. 0535, Birds sound like they are just now coming out of roost hole on this foggy morning. One bird that flew out to the top of the knoll and started to preen, I read as ^{LBlue-BK/LBlue} ♂571 from

06250. Pretty sure he roosted with the other birds (and ~~with~~ ♀604), so he probably is the special "mystery rooster" (6th bird) that Walter saw on 10 May.

0620, ♀604 looks at the Blue Oak hole briefly

0715, now watching granary for behavior, given little interest in Blue Oak hole.

0810, Nest check, two eggs, the two ♀♀ laying essentially simultaneously (see Walter's notes).

13 May 1981 Low-Hay egg-laying

			(F)	(FTF)	(MAF)
0715	all 4 g				
0720	♂307 ♀523 roast area / ♂461 ♀524 g	♂461			
0725	♀524 g / ♂461 ♂307 knoll	♀524			
0730	♂307 ♀523 Blue Oak / ♂461 ♀524 g		(3)	(1)	(0)
0735	all 4 g				
0740	♂307 ♀523 broken tree / ♂461 ♀524 g NI	♂461			
0745	" " " NI	♀523		(4)	(1)
0750	all 4 g				
0755	:	♂307			
0800	:				
0805	:	♀524		(1)	(3)
0	:				
0920	?	♂307			
0925	♂461 ♀524 broken tree / ♂307 ♀523 Blue Oak	♀523		(0)	
0930	?		(6)		(1)
0935	all 4 g				
0940	" " / NI				
0945	" " / NI				
0950	♂307 ♀523 knoll / ♂461 ♀524 g				
0955	♂461 ♀524 g / ♂307 ♀523 Blue Oak				
1000	end				

0715-0815

100 min

0920-1000

Melanerpes formicivorusLow Hay

(13 May)

(1) 21.4 x 17.3, (♀523) near runt, somewhat off-center air cell
26.8 x 20.8 (♀524)

Egg-tossing is over here!

0820. Big chase, involving the 2 ♂♂ and I believe

♀604 once again. ♀509 (green-D~~orn~~/yellow from Gazebo here intruding once again.

1100, ♀523 looking in, flies to hole, ♀523 away hole very hard ♂307 flies but things broke immediately

0915 watching from hide, to make sure both ♀♀ come back to the hole and do not throw the egg out. 1115 ♀524's been in 4 times, ♀523 once for a long visit, No eggs thrown out.

14 May

Start from behind hide at 0610. Foggy, blowing mist. 0614, ♀523 enters nest, ♂307 looks in a few times. 0626 ♀524 enters, ♂461 enters 0627. 0628, ♀523, ♂461, ♀524 all leave in rapid succession.

0716 ♀524 enters nest, leaves 0717

0720, ♀523 in tree (Blue Oak) adjacent to sap tree, being mobbed furiously by a pair of Gnatcatchers. She must be near a nest.

0730, No garricks heard yet this morning. Is ♀604 finally throwing in the towel, or is she just discouraged by the poor weather.

0735, nestcheck. One new egg, marked #3. Almost certainly the work of ♀523, since (1) she was the only ♀ to be in the hole for any extended period, (2) measurements (26.4 x 20.3) exactly the same as the egg laid without doubt by ♀523 on 3 May,

14 May 1981 Low Hay egg-laying

(F)

(FTF)

(MAP)

0615 all 4 g
0620 " NF
0625 " NF
0630 all 4 g NF
0635 " "
0640 " "
0645 ?

♂461
♀524

|||
(3)

(0)

0650 ♂461 ♀524 g / ♂307 ♀523
far tortuga

♂307
♀524

|
(1)

|| (2)

0655 ♂461 ♀524 g |
0700 ♂461 ♀524 g / ♂307 ♀523 FT
0705 all 4 g |

0710 all 4 g
0715 ♂461 ♀524 g / ♂307 ♀523 sap

0720 ♂307 ♀523 sap / ♂461 ♀524 FT
0725 ♂307 ♀523 FT

♂307 ||||
♀523 (4)

0730 ?

♂461 follows
both ♀♀

0615-0730

75 min

Low Hay pre-nest + egg-lay summary

		Follow	Fails to follow	Moves away
♂461	♂461	30	1	2
with ♀524	♀524			
not with ♀524	♂461	0	12	11
with ♀523	♀523			
not with ♀523	♂307	0	9	13
♂307	♀524			
with ♀524				
not with "	♂307	23	5	5
with ♀523	♀523			
not with ♀523				

Melanerpes formicivorusLower Haystack

(14 May) ③ Somewhat off-center air-cell, just like the "runt" that we suspect was laid by ♀523 yesterday.

Back up at 1000, nest check, a 4th egg! Laid very late, (between 0800 + 1000), by ♀524. Could this be her last egg?, or is she taking the day off tomorrow? We shall see. Anyway, measurements 27.3 x 20.5 Strange egg, almost elliptical (no "blunt" end), and very light. Would have been nice to weigh it. Very tiny air cell. Anyway, marked #4 and replaced.

Movie camera apparatus taken down in view of deteriorating weather (misty, etc.)

15 May Nestcheck 1000. As suspected, only one egg laid today, 25.2 x 20.9. Safe bet that this is ♀523's in view of ① ♀524's late laying yesterday (she is either through or taking the day off today) ② This egg (marked #5, has a slightly off-center air cell, just like the previous 2 eggs laid by her: ♀523.

16 May Start 0700. Sun of a gun, ^{Black-Blk / m} ♀587 whr-Blk / BPrk-Black is back! At 0720, she was leaf gleaning in the top of the granary, with only mild aggression from (I think) ♀524. The aggression was on the order of that seen in dominance interactions, as opposed to a full fledged chase.

0800, Nest check, still 5 eggs (!) What's worse, I have yet to see ♀523 this morning.

→ 1000, well, lots of weird goings-on. At 0845, #see ♂461 grappling briefly with a bird in the very, very wet grass

Melanerpes formicivorusLow Hay

(16 May) Between the 1^o & 2^o granary. Sure enough, it proves to be ♀523, soaked to the skin and unable to fly. I then warm-dry her ~~for~~ until about 0920. She seemed uninjured and alert and gave a number of alarm screams while I handled her. She also had a good cloacal swelling, a brood patch, and a large, hard object filling her abdomen (an incipient egg, no doubt).

At ⁰⁹²⁰ ~~0910~~, I let ~~her~~ ♀523 go on the trunk of the granary. She hitched weakly (but effectively) up a few meters before stopping in a sunny spot and resting. She sat there until about ⁰⁹⁴⁵ ~~1000~~, when the 3 other group members returned to the granary. About ⁰⁹⁴⁵ ~~1020~~, ♂461 flew down and started to peck & jump on the back of ♀523. ♀523 sat motionless and non-resisting for a few ~~few~~ seconds, then I think she flew off, in the general direction of the roost tree,

1030, watching above granary, no sign of ♀523, but 3 other birds all here. ♀587 doesn't seem to be around.

Also, no trace of ♀604 today. Perhaps ~~she~~ she has given up.

Doesn't look like anybody's paying much attention to the nest. I've seen ♀524 in, and ♂307, but they certainly aren't incubating with any earnest.

1120, Have just searched the grass between the granary and the roost tree (the flight path that I think I saw ♀523 take). Found nothing. I've also wandered around in the 2^o area some, also seeing nothing. Is ♀523 still around? Is she still alive, even? What will become of the nest? Right

Melanerpes formicivorusLower Haystack

(16 May) now, I'd have to guess there's a 50-50 chance of the nest being abandoned, much higher if ♀523 doesn't make a recovery.

- Why + how did ♀523 become water-logged? Two guesses,
- ① Early this AM she was flycatching tipulids in the high extremeley wet grass, got a little carried away, became wet + stuck. ~~I may have seen ♂461 + ♂307~~ I may have seen ♂461 + ♂307 doing the same sort of thing. Or I may have just seen ♂461 diving on ♀523 as she struggled in the grass.
 - ② Maybe ♂461 was grappling with ♀523 (like he did to her at the nest on 13 May), and ♀523 was forced down into the grass, where she became immobilized. This is supported by the fact that ♂461 grappled with ♀523 in the grass (the way that I found her), and his quick aggressive reaction after I returned her to the granary.

Whatever, I'm sure it happened early this morning. ♀523 certainly would not have survived a night like that, ~~the~~ much less be in as good a shape as she was. She was quite feisty when I found her, and I thought only tired and wet from trying to fly. I think she flew off with no problems. I wish she would have eaten some acorns while sitting in the granary (she was right next to some) but she didn't.

17 May Start 0700. Well ♀523 is alive! Seen chasing a ♀NIB intruder out of the broken tree, wakaing with ♂307 + ♀524. Also seen in the 2^o area and the watch tree. Unfortunately, by 0740 she has still not been in the granary, and I

Melanerpes formicivorusLow Hay

(17 May) have a feeling that ♂461 is excluding her. What's more I again see little evidence that the birds are seriously incubating. I think ♂307 + ♀524 have both been in, but I certainly haven't seen any long, continuous bouts.

♀604 may be back, as I've heard plenty of garricks early in the roost area, and saw ♂307 chase hell out of somebody over there.

0750 Yes, ♂461 is the culprit. ♀523 in the broken tree, ♂461 flies from granary and chases her around the broken tree, for a few seconds. ♀523 then flies to the watch tree. 0752, ♀523 "wakes to herself" in watch tree when ♂461 returns to granary. This is all very bizarre. Why has ♂461 now had this corn cob shoved up his ass, only after ♀523 has heaved out 3 eggs that he (presumably) fertilized.

0800, nestcheck. still 5 eggs.

18 May Nest check 1600. 5 eggs, slightly warm, although nobody was in the hole when I arrived.

23 May checked hole, 0830. ♀524 in hole when I arrived. Still 5 eggs. I introduce a die.

25 May Nest watch, 0855 - 1125. ♀523 is here, but she is still being denied access to the granary by ♂461. I saw ♂461 "attack" ♀523 briefly in the broken tree, and perhaps a second time when ♀523 flew to the granary. ♀523 seen only in watch tree, broken tree, & 2^o granary. Only ♀524 + ♂307 incubated during my watch. Nestchecked 1145, die still present, not thrown out within 48 hrs. Introduce plaster egg. No hatching yet.

Melanerpes formicivorusLow HayHastings ReservationLower Haystack

26 May Nest check 1130. No hatching yet.

27 May Checked the nest at 0715. Eggs (3), (4), & (5) had hatched, the 3 small nestlings were marked with ink on the right heel pad. Egg (2) appeared to be pipped, and egg (1), the near runt, does not look like it will hatch. I would guess that hatching occurred between late yesterday and today, (26-27 May), meaning 12-13 days of incubation. A little longer than most, probably because they really did not get into incubating until about 17 May.

Oh, yeah. Plaster egg still in, removed. Not thrown out in 48 hrs.

29 May Checked nest 1000. 4 babies, and egg #1 is gone. I would suspect that it was already thrown out, and failed to hatch. Unfortunately, the marks I put on the first 3 27 May have already worn off. So hatching @ score is a tie: 2 nestlings for both ♀523 & ♀524.

3 June Nestcheck 1710. 4 healthy babies

35.5 g/ yellow. L Blue

37.2 Or Brn

34.0 Mauve Black

20.0 NB 1-

25 June Bad news Bird #700 did not live long & prosper. After Mary's report of no feedings in 3 hrs yesterday, I check the nest to find the grim remain (well decomposed) of #700, but the remains of no other birds (!). I would suspect partial predation (weasel, ~~skunk~~, or what?) resulting in #700 being killed on the nest being abandoned. The group still has acorns, and even if

Melanerpes formicivorusLower Haystack

(25 June) they had starved to death, their remains ~~would~~ would have to still be in the hole. I don't think the adults could have heaved them out in their advanced state. Could the other 2 have fledged? Possible, but very unlikely. Certainly they would have had to fledge on 24 ~~June~~ June, making them a mere, well, not so mere 28 days old. However, J700 has to have been dead for at least ~~4-5~~ 4-5 days, and I suspect that he died shortly after banding on 18 June. I guess I should come up here to make sure that no fledglings are around.

3 Aug

Start 0920. Surprise, surprise! First bird I see is ♀604 Red-wht/Blk. In the 2^o granary, then the granary, looking like she belongs here. ♂461 also seen with her in the granary, not chasing her (!). Another ♀ also here, which I presume is ♀524, but haven't seen her yet for sure. 1040, The plot thickens! ♀523 ^{Metal/}DBlue-wht/DBlue is BACK! Chipped bill a-e all, she is here without questions and seems to be in good standing with ♂461. ♀524 ¹ Metal/ probably seen as well. However, no evidence of ♂307 who was suffering from a bad leg in June.

Why is ♂461 now so happy to let these two additional ♀♀ into the group, after all the hassle in the spring?? Ah... So much to think about...

→ Seriously, I would have to say that ♀523 + ♀604 moved here 15 July ± 1 week. My School Hill notes show that they were there (or at least at Y) until Early July (2 July). Since they look pretty relaxed + cozy here, I would have to bet that they've been here a couple weeks. End 1115.

Melanerpes formicivorusLow Hay

19 Aug Start 1030. Well, we're down to ♂461 ^{metal / LB blue - whr}
^{DB green - BPnk / white} and ♀524 metal / DB green - BPnk (N). Only birds here, as ♀523
 and ♀604 Moved to Hay Blom ~ 10 Aug ± 1 week. ♂307
 must certainly be dead. Could his bad foot had have
 had anything to do with his disappearance? Anyway, say
 ♂307 disappeared on 10 July ± 3 weeks. He was here
 on 14 June, but certainly gone by 3 Aug. However, check
 Mary's notes, as she watched up here around the first part
 of July, last of June, so she may have seen or not
 seen him then. End ~~10~~ 1130.

20 Sept After watching at Hay Blom and not seeing ♀523, I watch here
 1200 to see if ♀523 has returned here. 1230, I think
 she has!! Didn't see any bands, but I did see 3 birds
 here certainly, and I'm almost positive that I saw
 a ♀ here with a chipped bill. Would like to get her
 for sure. She has quite a history now.

5 Oct Watching here 1015 - 1140, yes ♀523 ^{m /} DB blue / whr ~~DB blue~~
 ♀524 metal / DB green - BPnk (N), ♂461 ^{metal /} all here
 and storing acorns (Looks like douglasii, mostly, from
 Ravine + far tortuga area. I also got a fleeting
 glimpse of a bird that might have been ♀587 ^{BPnk / m}
 out, I need to look further.

** 6 Oct GROUP UPDATE: Purge ♂307 ^{metal band} Last seen on nest watch by
 Mary Peacock, 18 June. His leg was quite bad (see Mary's
 journal and nest watch notes. However, he was not
 seen for certain after the nest failed on about
20 June. Lots of possibilities: ① ♂307 could have

Melanerpes formicivorusLow Hay

** (6 Oct) been a victim of predation at the nest, snuffing out him as well as the 3 nestlings. ♂307 was still roosting in the nest (see Byron's notes) on 25 + 27 May. Unfortunately, I didn't watch up here until 3 Aug, when ♂307 was certainly gone. Given that he was suffering from a bad leg, the predation hypothesis is just too tenuous given our poor data on the timing of ♂307's disappearance. See my previous notes. But to play it safe, I'll say ♂307 disappeared on about 10 July ± 2 weeks, bearing in mind that he could have been snuffed out with the nest between 18-21 June.

♀523 + ♀604 moved here (returned?) 17 July ± 2 weeks
Both were at Y with Shill birds on 2 July, certainly at Low Hay on 3 Aug. Both then moved to Hay Blom on 12 Aug ± 1 week. Both were "last" seen at Low Hay on 3 Aug, but both were at Hay Blom on 19 + 22 Aug. ♀523 however, returned to Low Hay on 6 Sept ± 2 weeks (seen back at Low Hay 20 Sept)

1 Nov A watch here, 1000-1200. A nervous start, as I first see a ♂NB flycatching from the broken Valley Oak. He disappears soon, but I find in the granary ♂461, ♀523, ♀524, all seen quite well, plus ♀587 ^{BPnk - Blk/M} wht - Blk/BPnk - Blk, back from oblivion!! Even saw her store an acorn. As far as I can tell, these birds are all pretty tight. Saw ♂461, ♀♀523, 524, storing a lot of acorns. As I recall, I thought I might have seen ♀587 here last time I watched (5 Oct?), but will have to check previous notes.

Melanerpes formicivorusLower Haystack1 Dec 1130, counted stores:

2 ^o granary :	<u>260</u>
main granary :	<u>2140</u>
<u>TOTAL</u>	<u>2400</u>

1981

R.L. Mumme

1

Melanerpes formicivorusBlomoneHastings Reservation10 Jan

Pass by here 0935. ♂513 Or-BPnk/Or here. Later, ♂584 BPnk/mauve as well. I've seen 3 birds here, I'm fairly certain.

3 March

Walk by here at 0920. ♂584 ^{metal/BPnk} and ♀478 m/DBlue orange in the granary. A third bird also seen, presumably ♂513. In addition, I saw ♂584 urking and mildly chasing a banded ♂ intruder, but I know not who. Back at 1230, a Beautiful

→

Prairie Falcon zips by, ♂ in the granary gives alarm calls. Not positive who, but suspect ♂513. Again, not sure.

23 April

Start 0730. Revolution, as reported by Walter yesterday, in full swing. ♂478 is gone, and lots of ♂♂

0733. 1500 contingent, ♂♂492, 493, 622 all here.

staked out on the periphery (Blue Oaks above the granary) waiting with a ♀NB.

→

End 0815, when I managed to run up and catch two birds locked in a death grip in the tall grass underneath the granary. One was ♀478, and I let her go. The other was a ♀NB, which I took back to the labs to be banded. ♀647 ^{BLK/M} BLK/BLK the "Black ♀". Anyway, I guessed about 12-10 birds here at least. 3 1500 ♂♂ 2 ♀NB, ~~all~~ a couple of ♂NB, the two residents, plus others will have to come back for a better look later.

Right now, ♀478 and ♂584 seen in control of the granary. Incidentally, the ♀NB that I caught was bleeding from some wounds in her mouth lining, presumably as a result of her tussle with ♀478.

1981

R.L. Mumme

2

Melanerpes formicivorusBlom-one24 April

Start 1145. Wild. The 3 1500 ♂♂, plus 3 cooperating unbanded ♀♀ seem to have control of the granary. Haven't seen ♀478 yet. 1155. Now I see her, but she's in the trees 20 feet SW of the granary, chasing others. She seems to be waiting with a ♂NB, and chasing violently a ♀NB. Have not seen ♀478 in the 1st granary, which at the moment (1220) is under total control by the 1500 ♂♂ and the 3 ♀NB. 1224, Looks like 2 ♂NB are with ♀484 in the peripheral trees. Have not seen ♂584 yet.

1250 Winding down a bit. The very peripheral birds have thinned out. Now down to the hardware: 3 1500 ♂♂, 3 ♀NB in control of the 1st g; ♀478 and 2 ♂NB controlling the area from 20 feet S of the granary south + west. Probably a maximum of 12 birds when I first arrived.

1300 Now starting to see the opening flurries between the 2 factions, right at the boundary between their respective territories. End 1315. Going to see if any of this has spilled over into Gazebo.

25 April

Start 1015. Very quiet! Here 5 min before I heard so much as a waka. ♀478 and the 2 ♂♂NB have lost ground. They now seem restricted to the two Valley Oaks, 20m E of the small dry cattle pond. (45 m W of granary). As yesterday 3 ♀NB and ♂♂492, 493, + 622 from 1500 are in control of the granary and almost everything else. I'd say this revolution is over. End 1100. No other intruders around.

13 May

Very quiet here at 1430. ♂492 ^{Or / Blk} + ♂622 ^{Blk / Or-Blk} seen, plus a ♀, but don't see anybody else around.

Forgot to mention ♀509
Gazebo
Dbr / Yellow
seen here
briefly at
about noon

wakas	garriks	drums	urks		
94	1	0	0	1220	One minute

Melanerpes formicivorusBlom-one

13 May Checked all the holes that I know about, finding nothing. Pretty windy, not a good time to watch birds. The 1979 + 1980 nest hole (in granary) appears to be occupied by starlings.

14 May Watching here 0815, ♀648 Grn-BLK/wht and a ♂ Metal/? in the top of the granary. Shee flies off toward the knoll, the male follows. 0915, ♀649 ^{wht/DBLue} here as well. So at least 2 ♀♀ still here. Again, foggy, windy, very difficult to see birds. Will try some other time.

17 May Trying to watch here again 1700. Jees; these guys are tough to watch. I get a glimpse of ♂622 ^{BLK-Or/BLK}, another ♂ + a ♀, but that's it. Walter says nobody looked at the hole with 2 eggs in the granary

1845, Now we're getting somewhere. I pick up 5 birds over at Blom 2. Points ① Looks like we're down to a 2-♀ group. ♀650 does not seem to be here ② ♂492 is hot for ♀649, following-wise ③ ♂493 + ♂622 are strongly following ♀648. See the bit of behavior on back

18 May Start 0550. Somebody is being chased continuously around the granary. Garricks heard as well. Is this ♀650, or (more likely, ♀478?) 0605 Lets hear it for predictive biology, the intruder is ♀478 ^{DBLue-Or/DBLue-Or} being chased around like mad by 2 birds (presumably ♀♀648, 649) ~~mmmm~~, 0730 Things have calmed down. A ♂ entered the hole facing the pond for a couple of seconds, but that was all. Rainy, misty. Bugging it.

17 May 1981 Blom One prenesting

1810 all 5 Blom 2

1815 492 649 g / 493 622 648 Blom 2

20 " "

♂ 492 F ♀ 649 1

25 " "

30 " "

35 " "

MAF ♀ 648 1

40 " "

45 all 5 g

♂♂ 493 + 622 F ♀ 648 III

FTF ♀ 649 1

Melanerpes formicivorusBlom One

(18 May)

"Nest" check 1300. The 2 eggs that Walter reported in the pond-facing hole are gone! Hole empty. Definitely a false start.

20 May

Start 0555. 0655, Nice dominance interaction between ♂493 + ♂622. The 2 ♀♀ and the 2 ♂♂ were all together on top of the big Blue Oak (with the holes) 20 m E of the small dry cattle pond. ♂493 gave ♂622 some very sharp, hard pecks (4-5), to the head of ♂622. At the same time I believe that I saw ♀648 chattering to ♀649, 'would like to nail down that relationship.

Looks like ♀649 has a nice strong double mustache on both sides of her head, while ♀648 has a much cleaner face, with only the slightest hint of a single 'stash.

End 0800, No interest in any holes. I believe that I saw somebody really trying to peck ♀648 away from ~~near~~ a main storage limb, with ♀648 chattering away. Wasn't sure if it was ♂ or ♀ aggressor.

22 May

Watch 0610-0745. No interest in any holes. Only thing of note was dominance interaction: ♂492 pecked hard at ♂622, in the granary.

24 May

Start 0610. 0700, Up until now ♂492 + ♀649 have been alone in the granary. ♂♂493 + 622 (presume ♀548) fly in from Blom 2. ♂492 then pecks hard, even climbing on back, at ♂622. ♀649 present, < 1 m away, in top of granary. 0730, Quitting. Birds all up on Haystack flat. Still no interest seen in any holes. When will they?

Melanerpes formicivorusBlomone26 May

Start 0620. 0630, ♀649 in top of granary with a Malacosoma caterpillar; She wipes it back + forth on a limb maybe 100 times before flying off (to eat it?)

0725, ♀649 enters (for about 15 sec) the hole in the Valley Oak 15 meters SW of the granary. I saw her look in briefly at about 0700.

0730, Sounds like many birds over by Blom 2.

0750, Back watching after climbing up to the 2° tree hole. Easy climb, with a couple of webbing ladders.

I doubt that she did anything.

→

0758 Moredominance, ♂492 pecks hard at ♂622, who then retreats into a "niche" in the large limb 2 feet to the south of the hole in which the birds laid eggs earlier. ♂622 really does act like a "baby". Lots of begging-like actions.

0900, Peeped into 2° tree hole. Not a good hole.

Lots of lichen + grass in the bottom, dragged in by starling, Bluebird, Myiarchus, or something of that ilk. I doubt that they'll nest there.

0915, over at Blom 2, I see ♀648 Green-Blk/Metal over here by herself. I just realized that I

hadn't seen either her or ~~♂493~~ ♂493 in the Blomone granary. What's more, I didn't see ♀648 in the granary on 24 May, either. When I flush ♀648 from the

Blom 2 nest tree, she flies toward Corral Viejo canyon, not toward Blom-one. Looks bad.

1040, after watching here a bit longer, still no sign of ♀648 (in the granary) or ♂493 at all. Is he here, ~~alive~~ at

Melanerpes formicivorusBlom one

(26 May) 1500, dead, or what? Also saw 3 1800 birds intruding here at 1010. (♂561, ♂562, ♀565)

28 May ♂622 seen at 1500, feeding young in the nest there (!). I Presume that the aggression from ♂492 forced him to go home

29 May Start 0615, I pick up all 5 birds (seen well) at Blom 2. ♂622 is here, but getting chased around the Blom 2 area a bit by ♂♂492 (especially) and 493. Short chases + supplants only, nothing. I also believe that I saw either ♂492 or ♂493 chattering to the other. 0720, fog blowing in, quitting. Only ♂♂492 + 493, ♀649 seen in the granary

Well, over at the mouth of the second canyon I pick up ♂584 Metal/BPrK. He's still alive anyway. A 2nd bird, with whom he looks friendly, also there

31 May Start once again 0610. Lots of harrits coming from Blom 2 0730, well, at least 4 birds here still, but as usual I see only ♂♂492, 493, ♀649. Is the 4th bird ♀649 or ♂623 (suspect former). No interest in holes. What's more, I saw ♂492 + ♂493 Fly away from ♀649.

Are they ever going to nest

1 June Start 0630. More of the same, No interest in any holes, Doesn't look like ♂♂ are following ♀♀. Lots of flycatching activity in the flat between Blom one + Hay Blom. I did see ♀548 Grn-Blk/wht in the granary when I first arrived. ♀649 ♂492 also here. Over on the flat, I did see a bit of chasing going on, so these guys may not yet have it together. End 0730.

1981

R.C. Mumme

7

Melanerpes formicivorusBlom one3 June

Start 0610 0810, Lots of strange developments. Early, only ♂492 and ♀649 in the granary, though it looked like a third (or even a 4th bird) around as well. However, lots of noise over at Blom 2. Over here I find ♂493 ^{LBlue/m} ^{LBlue/LBlue} and ~~♀478~~ ♀478 ^{DBLue-Or/DBLue-Or} ^m " " ; She is garricking occasionally, but seems to be truly hanging out with ♂493. I believe I heard them waka to each other. So far, no sign of ♂493 showing any interest in flying toward Blom-one.

5 June

Watching here a very late 0700. Garricks + Karrits coming from Blom 2. The 1st thing I see is ♀649 flying from the granary to Blom 2, not followed by anybody, even though I'm fairly sure ♂492 was in the granary. ♀649 the only bird I saw well, although at least 1 ♂ + probably a 3rd bird here as well. Getting tired of these guys.

7 June

Sunovagan. 0630, a veritable mini-revolution at the ~~head~~ mouth of the 2nd canyon on the Blomquist ranch. Main participant seems to be ♂571 ^{LBlue-BIK/LBlue} ^{Metal/LBlue-Black}, erstwhile of Gazebo, garricking from the tops of the Valley Oaks in the 2nd canyon.

♀623 ^{Red/Yellow} " " OF 1500 also seen here briefly, plus ♂571 has a very peculiar hoarse garrick. at least 2 other birds.

0700, ♂623 ^{Blk-Or/Blk} , ♂492 ^{or/Blk} m/Blk also turn up,

and I think ♀565 ^{wht/Metal} from 1800. ♂492 seemed to wander over here by himself, so he can't be too keyed on following ♀649 around.

8 June

Start watch at the granary 0700. 0810, I'm giving up on these guys. Once again, no interest in any holes,

reports seeing
" at the Y (lower
gran) on 6 June!
He's floating!

Melanerpes formicivorusBlom-one

(8 June) neither ♂ showing any interest in ♀649. Also, I'm now almost certain that ♀648 is gone (returned home?) No sign of her again today, and I don't think we've seen her for a week now. A bit of harriting and chasing at Blom 2 when I arrived, but it's been quiet since.

11 June Watching here 0830. When I arrived I flushed 2 birds out of the Valley Oak "watch tree" (tree with 2 holes) 75 m N of the granary. I find ♂493 harriting from the partially dead Blue Oak at Blom 2. He's by himself, I do believe. 0930. What do ya know, from Blom 2 I see a bird look into the 1st nest hole. Also, a bird entered a hole on the N side of the granary (hole faces Red Hill) that I had not noticed before, and exited with a stick. Doesn't look serious yet.

13 June I've had it! Watching here 0700-0800. ♂492, ♂493, ♀649 all seen quite well, no trace of ♀648. Haven't seen her since late May, I do believe. No interest in any holes, and I saw ♀649 fly off without being followed. They are not going to nest.

18 June Watching here 0700-0815. ♂493, ♂492, ♀649 seen, but that's it! ♀648 clearly gone. ♂♂ not showing any interest in the ♀. Both flew away from the ♀ on at least 2 occasions. Also, ♂622 ^{BIK or BIK} visiting here. He was behaving very sub~~ordinately~~ (chatters, cowering) in the granary, and I definitely saw ♀649 peck at him once. ♂♂ might have pecked at him a bit, too, but I wasn't sure.

25 June Quick look here 1130. ♂493, a ♀, and a 3rd bird. Nothing seems to be going on.

Melanerpes formicivorusBlom-one4 Aug

Start 0745. 0840, God, confusion reigns supreme over at Blom 2. In the B12 nest tree, I find good old ♀478 DBlue-Or/DBlue-Or Metal/DBlue-Or. I see her waka in rather friendly fashion with ♂493 LBlue/M. On top of that, we have here Juv. 678 LPnk/Mauve From 1500 (!). He was perched at a bit by ♀478, but seemed to be friendly with ♂493. How do they know that they are sibs? (so much to think about, ha-ha). Perhaps they were "introduced" by ♂623, although I have not seen him yet. Also another strange ♂ (or well-advanced juvenile) that I couldn't identify (DBlue^{Black}/M[?]). I've also seen ♂492 in the very nearly dead Blue Oak near the pond, and in the Blom-one granary. For additional confusion, I keep hearing occasional garricks coming from Blom One. Also, I saw a bird (I think ♀478) enter the Blom 2 1980 nest hole for a few seconds. Geez Louise! Hope I can figure this all out. I have to wonder if ♀478 has been in residence at Blom 2 since June (I saw her here 0930, These 3 birds still about Blom 2, End watch.

1125, an unidentified bird. BPink/metal (Red/metal?) (mauve/metal)
 Couldn't get the sex, karriting 75 m N of the gazebo. Who could that be? Possible ♀570, but I thought the color was more red than mauve.

20 Aug

Start at Blom one 0730. Well, ultimate confusion. I find little activity at the granary, but I hear/see lots of action on Big Knoll (Not Blom one). Wandering up there I find ♂492 Or/Blk M/Blk, and ♀649 wht/DBlue "/DBlue, a few unbanded birds, including some Juv that might have come from Blom 4 or CV 2.

? / ?
 Pnk/metal
 something
 like that
 over to Gazebo

676 > 675 1

675 > 678 1

Melanerpes formicivorusBlom 09e - Blom 2

(20 Aug) Plus, shit loads of 1500 birds. ♂622 ^{Blk-Or/Blk} Metal/Or-Blk, ♀676 ^{DBlue-wht/Blk-wht} Wht-DBlue/m (very prevalent!) ♀675 ^{Grn-wht/m} " / Dgreen (seen occasionally, "dirty" face), ♀678 ^{LPnk/mauve} Metal/mauve, all over on the big knoll continuously (more or less) from 0800 - 1000. All were eating green acorns, especially from the Big Live Oak that dominates the top of the knoll. I got the impression that ♂492 ad ♀649 would fly over to the Bl1 granary occasionally, but the other birds seemed to be on the knoll most of the time. I saw ♀649 chase ♀676 once, but I never certainly saw ♂492 chase anybody but the unbanded birds. I never certainly saw ♂492 chase ♂622 or any of the Juvs. Where these birds will wind up is a mystery to me. Also, ♂493 ^{DBlue/m} LBlue/LBlue put in a brief appearance on the knoll, but I saw him fly in from the direction of Blom 2, harvest an acorn, then fly back toward Blom 2. I'd say he is still in residence there.

Down watching Blom 2 at 1030, 3 birds in the granary (nest tree) when I arrive, including a ♀ I believe. Later, I find none other than ♀677 ^{M / DBlue-Yellow(N)} DBlue-Yellow(N) / DBlue the last of the 1500 Juvs, in the Blom 2 nest tree. Also ♀678 there briefly, ad even ♀676 cruised into the nearly dead blue oak for a few seconds. 1100, ♂493 here in the nest tree, as suspected. 1150, Just had ♂493, ♀478 ^{DBlue-Or / DBlue-Or} M / " , ♀678, ♀677, all in the nearly dead Blue Oak perch tree. Everybody looked happy, to boot. ♂493 + ♀678 may also have been sapsucking from the Valley Oak 10m west of the Laguna Conejo dam, but I wasn't positive. So it looks to me like Blom 2 is a real, live group! How

Melanerpes formicivorusBlom one - Blom 2

(20 Aug)

many of the juvs will remain here or at Blom one, or return to 1500 (new ♀ 601 a-dall) is still a mystery.

♂ 622 is also a real mystery. He is definitely not part of the Blom 2 scene (at least at the moment), but I also didn't perceive him to belong at Blom 1, either (I've only seen him ~~at the knoll~~ at the knoll). End 1200, Oh, over on the knoll I also saw some dominance interactions among the juvs, that I think are in accordance with Mary's observations:

500 Juv. Dom →

676 pecked 675 once, and 675 pecked 678 once. Whoa, 1205, in the Blom 2 Blue Oak, ♀ 478 gave a great precopulatory tail raise and crouch, and ♂ 492 made a feeble mount. H'mm. Wonder if a fall nest is on their minds. 1215, One more addition, J677 + J678 are sapsucking from the Valley Oak (!) next to the pond dam.

12 Sept

I stroll by the holes at Blom 1, find no evidence of a nest, or any birds, period. But I do see a couple of birds at Blom 2.

Watching Blom 2 0900. Some activity up toward the big knoll as well.

0945, well, ♂ 493 LBlue/LBlue, ♀ 478 ^{DBlue-Or/} M/DBlue-Or absolutely here, and showing a great deal of interest in the 1980 nest hole (!)

♂ 493 in particular is making a lot of short trips to the hole, but I saw him enter a couple of times. I don't think they should have a nest, but it's worth keeping an eye on it. ♀ 478

is doing a lot of garricking, and no evidence of ♂ 493 following the ♀. I now must acknowledge that Blom 2 is a legitimate group, and henceforth will take notes on it separately. Nobody but ♂ 493 and ♀ 478 today. Oh, but I heard what sounded like three birds calling from Blom 1 earlier

1981

R.L. Mumme

12

Melanerpes formicivorusBlom one14 Sept

Well, we do indeed have a threesome at Blomone. Watching the granary at 0815, I spot ♀649 ^{white/DBLue} " / " and old ♂622 ^{Black / Or-Black} back and looking like a member in good standing. Plus, a third bird (♂) which must certainly be ♂492, though I didn't see bands. Birds shuttling back and forth between the big knoll and the granary. No evidence of any of the current 1500 Juveniles hanging around the granary, but I need to check the knoll area.

0930: Great stuff. On the knoll, in the VO's on the north side, I find 1500 JO ♂677 ^{M / DBLue - Yellow (N)} " / DBLue actually defending a small area around a small, mistletoe capped VO. I even saw him chase 2-3 times ♂623 ^{8/K or/8/K} his older brother who helped raise JO ♂677! What a punk! I guess this says something about site-related dominance. ♂677 seems pretty serious. Also saw him chasing a ♂NB.

Very strange. There are, of course, a very few storage limbs up here on the knoll. And there are a lot of acorns up here. So who knows?

1 Oct

A quick walk by ♀649 ^{wht/DBLue}. These birds (now just 2?) have started storing! About 30 or so new acorns in the granary.

** 6 Oct

Group update: ① ♀648 is clearly gone, almost certainly returning to her natal territory (wherever it might be), ~~with~~ rejoining ♀650. ♀648 last seen on ~~the map~~, 1 June and I think certainly absent by 8 June, so say ♀648 left group about 5 June ± 0.

② ♂493 moved Blom 2 14 July ± 2 weeks. Last seen certainly at Blom one 25 June, but was visiting

Melanerpes formicivorusBlom one

** (6 Oct) at Blom 2 (with ♀478) as early as 3 June and 11 June
 He was clearly "in" at Blom 2 on 4 Aug. 1

③ ♂622 returned to Blom 1 20 July ± 2 weeks:

Last seen at 1500 3 July, at Blom 1 certainly by 20 Aug and
 probably by 4 Aug. ^{♂622} He then moved back to 1500
on about 22 Sept ± 1 week. Last at Blom 1 on

** 14 Sept, storing acorns at 1500 on 30 Sept.

10 Dec a successful watch here. Both ♂492 and ♀649 seen
 very well. Also, ♀668 ^{Blk-Grn / m} " / Blk of Y-Shill seen
 intruding here, so she may not be completely happy at Y
 (understandably so).

1981

R.L. Mumme

1

Melanerpes formicivorusGazeboHastings Reservation

DBLue - Yellow / DBLue

10 Jan

Start 1045. ♂ 516

♂ 517

LPnk / M

LPnk / LBlue

seen right away,

then ♂ 571 LBlue - Blk / LBlue

Metal /

viciously

chasing a ~~nut~~ nuthatch out of the granary. Pretty slow, otherwise.2 March

10-1200

good watch here

♂ 516

DBLue - Yellow / DBLue

M /

♂ 517

LPnk / M

Metal /

" / LBlue

♀ 509

Lbrn - DBLue / Yellow

♀ 570

Mauve / LBlue

LBlue - Blk / LBlue

♂ 571

M

/ LBlue Blk all

seen well. I think that this might well be a complete census. At 1145, all 5 birds together in big dead VO 50 m west of granary area. No sign of anybody else.

Almost certainly no new ♀ yet. End 1200

17 March

A quick swing past here at 1000, I flush a couple of birds.

No evidence of revolution (power struggle) for the ♀ vacancy yet.

28 March

Another pass by here, 1545 All's quiet.

AprilYonah

After seeing ♀ 509 in the incipient revolution at Low Hay,

I decide to swing by here at 1630. ♂ 571 LBlue - Blk / LBlue

Metal

here, Plus 2 others that (as usual) I don't get a look at.

No revolution activity anyway. OOPS, just as I'm

about to leave I see ♀ 570 mauve / m, ♂ 516

DBLue - Yellow / DBLue

Metal / Yellow LBlue

and ♀ 509, back here the same day!

How about that. Perhaps she'll take ♀ 570 with her up to Low Hay tomorrow. End @ 1720.

8 April

Another pass here, 1100-1114. All quiet.

15 April

Here at 1215. No activity

20 April

Stop here at 1500. No revolution activity, ♂ 571

LBlue - Blk / LBlue

and two ♀♀ (one probably ♀ 570 mauve / metal, the other ♀ 509) all I see.

1981

R.L. Mumme

2

Melanerpes formicivorusGazebo

28 April Sunofagan. Here at 1130, and a ♀ NB is in the granary. How about that? Wakaing, looking like she owns the place. I see her a lot (perhaps 2 ♀ NB? & Possible!) How did she sneak in here without the formalities of a revolution? Perhaps she did, and we missed it. Will have to watch here later.

30 April Here at 1000. ♀ NB still here, wakaing & tail raising only occasionally. ♂ 51b m/yellow-DBlue also seen

13 May Walking around checking holes at 1500. A ♀ looking out of the 1979 nest hole (broken stub, near the Gazebo area) may mean nest. The ♀ had a dot of white-out smack in the middle of the black forehead, so I'd bet it's the ♀ ambushed by Walter 4-5 days ago.

Earlier today, ♀ 509 ~~see~~ intruding at Low Hay. And ♂ 571 LBlue-BK/LBlue seems to be roosting with the birds at Lower Haystack, for god knows what reason. See Low Hay notes

15 May Checked the 1979 (now 1981) hole here. ~~at~~ at 1130. 4 eggs fairly fresh (3-4 days?). Birds seem to have been shitting in the hole as eggs stained with brown. Bird in the hole when I arrived

16 May Routine nestwatch

17 May " " "

19 May " " ". However, I have a feeling this group is down to just ♂ 51b and ♀ 653. Those are the only birds I've seen at the nest, & I've yet to hear waka's while one is incubating.

Melanerpes formicivorusGazebo

20 May Wandering around here, 0815 - 0945. Picked up 3 birds in the S gazebo area, but they proved to be 2 ♀ NB and a ♂. Suppose they were just wandering from a territory along the road, somewhere. ~~Approx~~ 1000, just as I'm leaving the (same?) 3 NB birds fly into the main granary area. Mildly chased around by one of the residents, (the ♂ S16, F suspect, since ♀ 653 was in the nest). Again, no evidence that we have anything more than a pair here.

22 May Routine nest watch. I don't think that the eggs have hatched yet.

26 May Eggs have hatched by 0930. I hear peepings from the nest when an adult looks out at me. Will check here in a few days.

29 May Nest check 0930. 4 babies! all eggs hatched

DPk DBlue 20.6g

LGrrn Or 18.5g

Red - Tan 12.0g

NB 9.4g

3 June Disturbing nest watch, 1415 - 1615. No visits. ♂ S16 came to the nest tree without food, garricked a few times (!) but nobody else. Wakas here, so I guess the ♀ is still around. Has the nest failed? 1630, well, no. I climb up and perilously reach out and put my hand over the hole and hear (weak) peepings. Also, these guys are nearly out of acorns. May be about to fail?

5 June Looks like they have Failed. Watch the nest 0800 - 0900

Melanerpes formicivorusGazebo

(5 June) No visits. ♂516 and a second bird are here. I've seen them in the nest tree and ♂516 in the Blue Oak at the fence line (n of the gazebo), and never saw him with any food in his bill.

Not like my presence is keeping them away. Will have to drag the ladder over here soon. Nest failed!

4 Aug Watching here 1100. Well, who should be in the granary area than ♂516 Metal/Yellow-DBlue AND ♂571 ^{LBlue-BK/LBlue} / ^M / LBlue-Black.

How about that? Back home after wandering like crazy during the spring. On the same branch as ♂516, he was chattering a great deal. Perhaps suggests that ♂571 was forced to leave when the new ♀ arrived (by ♂516) and now, after the breeding season, is patching things up. ♀653 ^{Lorn-wh/Lorn} / ["] / ["] here as well. See page 9 of Blomone notes, eccidentally entered record of a bird Red, BPink, DPink, or Mauve / Metal near the Gazebo. Couldn't get the sex. Perhaps ♀570, Mauve/Metal, but I thought the bird was pretty much on the red side.

1150 Confirm ♀570 ^{Mauve/LBlue} / Mauve/metal, on the ~~Asa~~ fence line Live Oak 40 m ENG of Gazebo. Didn't see her interacting with anybody, but she certainly acted like she belongs here. Would like to see her and ♀653 together. I wonder if ♀509 is around, too. End 1200. ♀653, ♂571 both seen in the same tree that ♀570 was in (though never together). So I'd guess it's a foursome. Could ♀509 be here as well? Possible, since it wasn't a great census here.

12 Sept Checked holes here, nothing.

1 Oct A quick pass: 4 birds here: Only ♂516 + ~~♂571~~ ♀653 seen with certainty, but others probably ♂571, ♀570. Storing has begun.

Melanerpes formicivorusGazebo** 6 Oct

GROUP UPDATE:

① ♀570 returns 4 July $\pm$ 1 month. Last seen roosting at Gazebo in late April-early May (see Walter's notes) but definitely absent through the nest period until nest failure, 5 June. First seen back at Gazebo 4 Aug.

② ♂571 returns 4 July $\pm$ 1 month. ~~Was~~ seen at Gazebo 20 April, roosting at Low Hay 13 May (!) intruding at Y 6 June + Blomquist Canyon 7 June.

**

Back at Gazebo on 4 Aug. Definitely absent from Gazebo, May - early June.

20 Nov

I try to watch here, 1200, and though I think I get a glimpse of ♀570 Mauve/Metal, and a ♂ Metal, basically I struck out. Birds doing pretty well acorn wise. Also, At least 4 UB birds were hanging out around the old VO granary down the road toward CV #1. Probably were CV #1 birds, but it will be worth keeping an eye on. No stored acorns there yet.

1 Dec

Counted stores, 1300:

Total

122010 Dec

Watched here 1030-1200, and did all right. ^{DBLue-yellow} ♂516 M
 ♂571 ^{LBBlue-Blk/LBBlue} M and ♀653 Grn-wht/Lbrn all seen.

So that fills in the census, having seen ♀570 on 20 Nov.

Still lots of live oak acorns left in some trees along the fence line.

Melanerpes formicivorusBlom 2

1 Oct (see Blom 1 notes for other information). Sitting near here 1000, ♂493 LBlue/LBlue in the nearly dead Blue Oak.
1030, ♀478 M/DBLue-or also here. No fall nest, but storing has begun! A few acorns in both the 1980 nest tree and is the "granary".

** 6 Oct GROUP UPDATE:

① ♀478 founded Blom 2 26 May ± 1 week

♀478 still intruding at Blom 1 on 18 May, but seemed to be established at Blom 2 on 3 June (certainly in residence there on 4 Aug.

② ^{♂493} ~~♂493~~ moved as adult to Blom 2 14 July ± 2 weeks. Last seen at Blom 1 25 June, though visiting at Blom 2 as early as 3 June and 11 June, (clearly in by 4 Aug.

**

20 Nov A quick look, 1200, ♂493 LBlue/LBlue and ♀478 M/ both here. A decent # of acorns stored.

Melanerpes formicivorusBlom 38 June

Did a bit of exploring today. Continuing N/E toward Corral Viejo along the "road" that goes by Blom 2, in about $\frac{1}{2}$ km you come to a sleazy-looking Blue Oak granary on the right. I've noticed this tree before, but today was the first time I'd seen it with acorns. Walking around I found 5 nice-looking holes in 3 trees. 3 of the holes I climbed up to and stuck my hand in, with no response (see reverse). Seems like they should have a nest. Regardless, will be worth trying to find where they roost and ambushing later this summer.

4 Aug

I walk by the granary, find acorns essentially gone. Birds around to the SW, but it could be Blom 2 activity. 1215, Over in one of the "hollows" by Gazebo, I find 2 Juveniles, without bars! Also a dominance interaction, which will do me no good. Juv look pretty old. I then find a couple of adult ♂♂, plus a juv in a sap tree. See map on back.

6 Aug

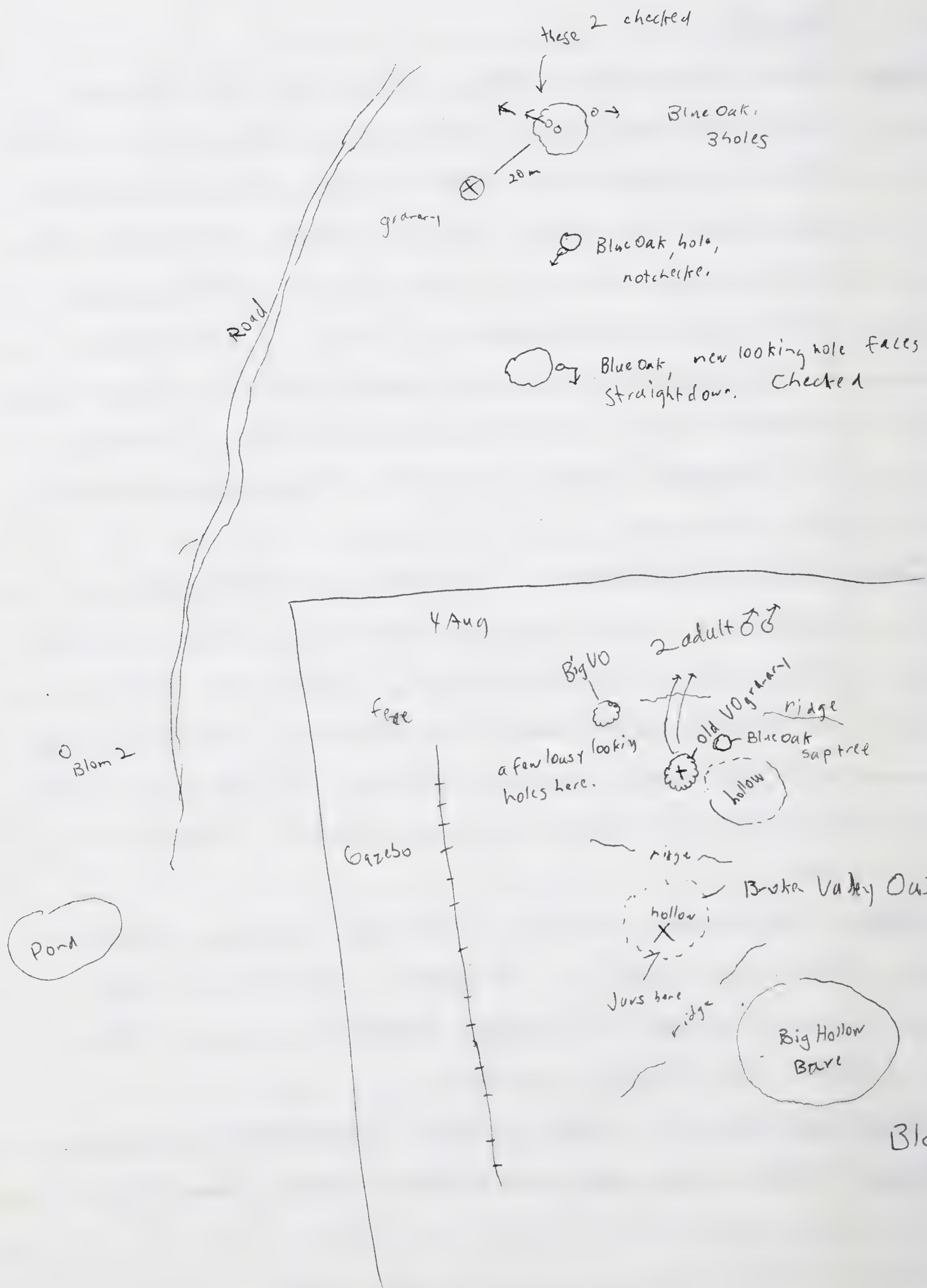
Tried to watch roosting at the "major hole area" (the 5 I described 8 June) nr the granary. One bird cruised by as I arrived, but nobody roosted in any of those holes. No karrits, no nuthin.

12 Sept

walked by here. Lots of birds, but nobody in any holes.

20 Nov

4 birds in the area and lots of acorns stored here.



Melanerpes formicivorusDark Hollow (CV #3 Blom 4)12 Sept

Passing here 1030 I actually ran ~~over~~ across a banded bird near the dark hollow granary. I read the bands as ^{Metal/BPink}, though I thought that it was a ♀. If I was wrong, and it proved to be a ♂, that would suggest old ♂584, formerly of Blomone. I remember Walter saying that this territory was unoccupied last year.

1110, yesiree, In the granary, I confirm ♂584 BPnk/^{M/BPink}mauve here with a ♀ of unknown band status. I would like to get a good look at her! So this territory seems to be certainly occupied by a pair. Wakas, very friendly, etc., always moving around near the dark hollow granary

1140 Fantastic! The ♀ is ♀509 of Gazebo, ^{M/}Lorn-Dorn/Yellow. Wowee Zowie! Another banded group with known-age, known origin birds, with no effort. These guys are serious too, as I saw ♂584 chasing a ♂NB intruder from the granary area. They are showing every indication of staying + storing acorns. Great. End 1145. No evidence of a full nest.

** 6 Oct

GROUP UPDATE: ~~This~~ This territory not occupied previous winter (see Walter's notes)

① ♀509 founded as adult July 10 ± 2 months (

Last seen at Gazebo in mid April, then seen intruding at Low Hay 13 May, first seen Darkhollow 12 Sept

② ~~♂513~~ ♂513 founded as adult July 10 ± 2 months

Last seen at Blomone late April, intruding at Low Hay 10 May and Blomquist canyon 29 May. First seen at Dark Hollow 12 Sept.

** 20 Nov

A stroll past 1230, both ♀509 Lorn-Dorn/Yellow ♂584 ^{M/BPink} here. Only a few acorns stored, the granary is loaded with not ripe acorns. Perhaps because the big live oak 20m was

1981

R. C. Munne

1

Melanerpos formicivorusGateHastings Reservation12 Jan

A quick stop here at 1315. ♀601^{L Green / Yellow} flycatching as I drive up. Another ♀ (presume 519, but didn't see birds) and ♂627^{L Pink / DBLue} show up briefly. 1430, all 4 birds together up on the side of School Hill including ♀519^{Blk - Yellow / Black} and ♂626^{Metal / DBLue-wht (N)}. Complete

census

8 March

Poking around here, ~~noon~~ 1200-1400, I get in a complete census. ♀519^{Blk - Yellow / M}, ♀601^{L Green / Yellow}, ♂626^{M / DBLue-wht (N)} and ♂627^{L Pink / DBLue}.

Again 3 of 4 (save ♀519) flycatching from Blue Oaks on side of School Hill

10 April

1510, 4 birds seen here in passing, so ♀601 must be back from the Lower Haystack Revolution (see LH notes)

Back at 1630 with M. Peacock. All 4 birds seen well (♂626, ♂627, ♀601, ♀529). Believe it or

not, birds still harvesting acorns from that agrifolia along the creek 40m S of the Hastings Gate!

Lots of intruders in that tree but the only one I identify ♂577 from Rd 1^{Blk - B Pink / B-Pink}.

Good mate guarding seen (see reverse) with ~~ignoring~~ ignoring of ♀601 by the two ♂♂. Here with binos, I saw mountings, with no interference ~~between~~ by a third bird watching the copulating pair. Interesting. Will have to watch here more. end.

12 April

Start watch here 1140. Bird looking out at first. ♂♂ following ♀, but they're not being fanatics about it (if you know what I mean). ♀601 seen in hole briefly, ♂627 at hole; End 1250

10 April 1981

♀

F

FTF

MAF

1630 core 3 SH | ♀601 SH

1635 all 4 SH ni = ♀519

1640 ?

1645 all 4 SH |

? ?

1700 all 5 FC |

1705 core 3 g | ♀601 Finch Creek

{ ♂626
♂627
both ♂♂

|||

{ both ♂♂

||

||

•

12 April 1981

F

FTF

MAF

I

1140 core 3 g | ♀601 gate |

1145 all 4 gate |

1150 all 4 gate |

1155 ♀601 g | core 3 Arnold

1200 ?

1205 ?

1210 core 3 g

1215 all 4 g

1220 ♀601 g | core 3 elsewhere

1225 ♀601 ♀519 ♂627 g | ♂626 elsewhere

1230

1235

1240 ♀601 g | others elsewhere

1245 ?

1250

♂626

♀519 both ♂♂

♂627

♀601 both

|||

I 3 Sec follow

|||

1981

R.L. Mumme

2

Melanerpes formicivorusGateHastings Reservation13 April

Start 1135. Neglected to write that I watched roosting last night. Didn't see what happened, really, but there was some substantial aggression between two of the birds fighting + scrapping in the presence of the ^{presumed} ♀. Today, ♀ following by ♂626 + ♂627 continues, though ♂627 was slacking off a few times (see reverse) End 1245.

16 April

gate

7x20.0

5.15 g

After seeing a bird looking out of the low broken stub hole at 1440, I return to check the nest at 1630 and find it still empty. I do, however, introduce 1 fake egg into the nest. Hopefully, it will be tossed out within a day or two.

18 April

Nest check at 1700, and the ~~fake~~ fake egg is gone! N=2! Thrown out within 48 hours. Also, these guys have not started laying themselves yet.

19 April

watching the granary at roosting, I don't see anything!

20 April

Check the stub hole after seeing a bird at the hole this morning. 1800, still no eggs.

22 April

Another check, no eggs. Perhaps these guys are in another hole? I'll watch here tomorrow

23 April

Watching here 1320, ♂♂ still hot on following the ♀. No interest shown in any holes, however. As before, ♂627

♀601
missing

not quite as a persistent follower than ♂626. 1430, lots of intruder action, the only one I see is good old

♂540 from Finch ^{DBrn / LPnk} m / LPnk. 1450, Also ♂501 ^{yellow / m} at ♂542 ^{LBine - or / LBine}, both from Finch. Concentrating

their activities in the Live Oak near the gate that still has acorns. That must be the attraction. 1500, All of all birds,

13 April 1981 Gate Pre-nesting behavior

		F	PTF	MAF
1135 all 4 g	♀519 ♂626	I		
1140 ♀601 g others Arnold	♂627		I	
1145 ?	both	III		
1150 ♂627 ♀601 g ♀519 ♂626 Arnold	-626			
1155 nobody g	♂626			I
1200 ?	♀601 ♂627			
1205 ?	both			I
1210 ♂627 alone g				
1215 nobody				
1220 ♀601 g core 3 gate area				
1225 core 3 gate area				
1230				
1235 all 4 g				
1240 core 3 gate area				
1245 core 3 gate area I				

(5) follows

Gate 23 April 1981

		F	PTF	MAF
1320 core 3 g	♀519 ♂626	I		
1325 " " " NI	♂627		I	
1330 " " " NI				
1335 " " " NI	both	III		
1340 ♂627 alone g				
1345 nobody				
1350 core 3 g				
1355 core 3 Haystack				
1400 core 3 g				
1405 core 3 Hay				
1410 core 3 g				
1415 core 3 Hay				
1420 ?				
1425 core 3 g				

(8) follows

Melanerpes formicivorusGate

(23 April) ♀587, formerly of Lower Haystack, ^{BPK-BK/M} ~~wh + BK/BPK-BK~~, is also in the gate area. Visits the acorn laden live oak, but sits for a long time in the spindly Valley Oak 30 m S of the gate. Not seen at Low Hay since late in the revolution there. Now obviously floating. 1510, 2 times ♀587 picks acorns off the ground from under the Live Oak.

Back here 1545, ♀587 still here, plus ♂616 ^{Yellow-DPK/Yellow-DPK} of Finch. Saw both go to the ground underneath the live oak, then carry away acorns.

25 April At 1145 2 birds were looking out of 2 different (but adjacent) holes in the very "holey" limb in the gate streamer. A third bird was standing on the limb as well. Hope they lost nest there. Both holes faced the swimming hole, more or less. Will have to keep tabs on it.

→ Watching 1230. About the 1st thing I see is ♀519 fly into the granary carrying a lizard, presumably a Sceloporus. ♂♂ still following the ♀ closely. Like 23 April, a couple of flights up on Haystack Hill. ~~Q~~ ♀601 not seen for certain, but a 4th "resident-looking" bird was seen near the granary & the gate. Also, ♀587 ^{BPK-BK/M} is still camped out at the gate. Saw her in the same spindly Valley Oak as 23 April.

27 April Coming by at 1100, Lots of activity in the hole we originally thought they would use. Birds looking out, etc. I freestyle it up to the hole at 1145, but nest still empty. I remedy that by introducing a plaster egg.

→ 28 April Walter say egg tossed out by early this AM.

30 April Swing past at 1430, and two birds in the hole, one just

25 April

1230 cae 3 gl
1235 " 1 NE
1240 " "
1245 " "
1250 " "
1255

① follow

both follow

9519

1

Melanerpes formicivorusGate

(30 April) Outside, I flush them out, and they fly off in a very tight pack of 3. I go up to the "nest" and find (once again) no eggs. But the bottom has a much nicer cushion of wood chips than I remember from past checks.

1520, watching for a while here. ♂♂ still definitely hot following the ♀. May even be showing more tight packing than previously. ♀601 is missing again.

4 May Nest check at 1700. Of course, the nest still has no eggs, even though I've been seeing birds in or at the hole virtually constantly. However, the bottom is now very nice and well cushioned. Tomorrow?

5 May Introduce 2 eggs to the nest at 0615, trying to get egg-tossing photo. At 0635, ♀ entered, followed closely by first one ♂, then another. 0810, everybody leaves. Nest check 0830. 2 fake eggs, plus one real one. (#1) She finally laid today, but did not throw out the two plaster eggs beforehand. Hmmm! Why didn't she? Could she have had to lay at exactly that time, no later? Anyway, egg #1 laid 5 May, about 0640.

Watching 1720 ♀601 metal/whr-screen here, after along absence at 1755, all 4 birds in top of granary, both ♂♂ peck hard at ♀601.

Watched until roosting, when I'm pretty sure all 3 cone birds roosted in the nest. The ♀ went in very early, and the two males just flew around the hole after that. Saw pre-roost mounting between the ♂♂ (with no aggression). Late, I saw ♀519 fly to a ♂ and give a precopulatory

Gate 30 April 1981 Prenesting

1540	core 3 g			
1545	" NI		both	
1550	" NI		follow	FTF
1555	core 3 arnold			MAF
1600	core 3 g	(3)	(0)	(0)
1605	core 3 haystack		♂626	
1610	nobody around		♂627	
1615	" " end			

Gate 5 May 1981 Egg-laying

1720	?		both follow	♀519
1725	nobody			
1730	nobody			
1735	"	(3)		
1740	"			both MAF
1745	"			FTF
1750	"			♀601
1755	all 4 g			
1800	♀601 g core 3 elsewhere			
1805	♀601 g " " NI			
1810	nobody			
1815	nobody			
1820	core 3 g			
1825	" " ♀601 Haystack			
1830	♀601 nest core elsewhere			
1835	" " NI			
1840	" " NI			
1845	all 4 g			
1850	♀519 ♂627 nest ♂626 g	NI		
1855	" " " " " "	NI		
1900	"			
1905	all 3 in/at nest NI			

Melanerpes formicivorusGate

display, + the ♂ made motions to mount her. However, the other ♂ immediately flew down, and nothing happened.

6 May Start 0700. ♀ and ♂⁶²² in nest as I arrive. ♂⁶²⁶

Following, of course, but now it looks like ♂⁶²⁶ is the "less devoted" consort to ♀⁵¹⁹, while it was ♂⁶²² well before egg-laying. End ~~at~~ 0920.

No dominance, copulations, etc.

Watching again in the evening. Lots of following.

Birds moving around a lot on the side of Haystack, even flycatching from the rocks + chamise. No mountings seen, no copulations, etc. Again, the ♀⁵¹⁹ seemed to roost early, but I don't believe it was in the nest hole. When do these guys copulate, anyway?

7 May ♀⁵⁸⁷ ^{B Pink-BIK / Metal}, erstwhile of Low Hay, sitting in the little Valley Oak 30 meters S of the gate, at 1420, as she was a couple of weeks ago.

Nestcheck at 1430: 3 eggs, so I laid both yesterday + today. I did not pull the eggs out of the nest, considering the difficulty I had with that 2 days ago. Thus, they were not marked or numbered.

9 May Nestcheck 1100: 4 eggs. This may well be the complete clutch. ♀⁵¹⁹ failed to lay either yesterday or (more probably) today.

13 May 1800 Nestcheck. 4 eggs it is. I also introduce a die to the nest, to see if it gets chucked.

15 May Nestcheck 1800. Die still in the hole, not thrown

6 May 1981 Gate egg laying

♀519

(0800) 0700 start

0805 ♀519 ♂627 n, ♂626 g |

0810 " " " " | NI

0815 core 3 g | NI

0820 ♂627 ♀519 g | ♂626 arn | -626

0825 core 3 g | NI

0830 core 3 arnold |

0835 nobody

0840 nobody

0845 core 3 arnold |

0850 " " " | NI

0855 core 3 g |

0900 ?

0805 ?

0810 ?

0815 ? looking for birds

0820 ? on side of

0825 ? Arnold

0830 ?

0835 ♀519 ♂627 nest ♂626 g |

0840 " " " | NI

0845 " " " | NI

0850 " " " | NI

0855 ♀519 ♂627 nest | ♂626 gate area

0900 " " " | NI

0905 core 3 g |

0910 ♀519 ♂627 g, ♂626 Arn |

0915 core 3 arnold |

0920 " " " | NI

(12) both: ~~III~~ (III II)

♂626

♂627

♀601

both

♂626

♂627

II (2)

6 May (cont)

1555 ?

1600 }

1605 }

1610 }

1615 }

1620 }

1625 }

1630 core 3 g ♀601

1635 ♀601 g | core 3 Haystack

1640 core 3 Haystack | ♀601 g NI

1645 " " " "

1650 " " " "

1655 " " " "

1700 core 3 Haystack | I

1705 core 3 ♀601 Haystack | I

1710 "

1715 "

1720 core 3 Haystack I | NI

1725 "

1745 core 3 g

1750 " NI

1755 " NI

Melanerpes formicivorusGate

(15 May) Out within 48 hrs. In fact, I put the die in the hole well apart from the eggs, but looking in I found it incorporated into the ~~the~~ very center of the clutch.

Anyway, die removed, and the good plaster egg introduced.

18 May Nestcheck 1130. Hatching. One egg has already hatched. I pulled out egg #1, which looked like it should hatch soon. Using a syringe tip, I poked a small hole in the air cell, then injected in another part of the about 0.05 ml of blue food coloring. We'll see if this works in determining which eggs produce which chicks. Very small (~3mm) piece of scotch tape used to patch injection hole.

Neglected to mention that the plaster egg was still present, not thrown out

19 May Checked nest 1500. Well, bad news for dye injection. The egg I used (#1) did not hatch. 2 eggs have already hatched, and the 3rd pipped + ready to hatch. I suppose the egg might not have hatched anyway, but you never know.

22 May Nestcheck 1600. 3 babies, 2 large, 1 small, and egg #1 (which I dyed) is gone! Probably already heaved out. It's possible that it hatched, and the nestling died and was ejected (or didn't die and is present in the nest), but I doubt that, since it was the 1st egg laid and hadn't hatched by 19 May.

15 June Roosting, and I'm pretty sure I saw metal on the right leg of the bird that went in, meaning ♂ 626 roosted

Melanerpes formicivorusGate

24 June Watching here 1030. 1100, who should intrude (and be chased out quite violently but 2523 of Still-Low Hay. She then flew to the top of the W gate granary, then continued NW.

25 June Looking for Juv. Dominance early here, no luck

30 June 0900, success finally, after watching here since 0630. J686 alone on the "low" storage & hole limb, J685

LBlue-Red / LBlue flies in. They both lock bills, stabbing, lunging, and it looks like a tossup for a few seconds.

Then J686 turns head, and J685 pounds away at the head of J686 5-6 times. Good! No adults near.

J685 seems to have problems with his left(?) eye, as it looks like he's keeping it closed most of the time.

Maybe a peck from an adult or J684.

Of the latter, I got some iffy evidence that

J684 > J685. On Valley Oak alone nr swimming hole,

J685 alone: J684 flies in, lands below, hitches up past

J685, and I'm almost certain J685 chattered. It would be nice to confirm that.

1 July watching 0920; 1040, up till now, virtually non-stop action in the low storage & ^{multiple} roost hole branch. All 3 babies with much

dominance. J684 > J685 > J686 each 3 times,

all hard & definite, all with adult present. The other

3 were J685 > J684, although none were perfectly clear-cut.

One, J685 definitely lunged (but missed) J684 as the latter hitched past. One, was a standard peck with adult feeding, but I didn't

see it perfectly. The last, J685 in the broken top of the limb,

J684 started in, and came right back out, looking like he had

30 June J685 > J686 1 (very vicious)
(dubious) J684 > J685 (chatter only, no pecks.)

1 July (includes 1 from J)

J685 > ~~J684~~ J686 IIII

J684 > J686 III

J685 > J684 III

Melanerpes formicivorusGate

(1 July) been under a pecking attack. J685 > J684 runs counter to yesterday's "iffy" interaction, so I would definitely like to see it unambiguously at least once. However, I think (will have to check the nest record again) that J685 had a longer wing than J684. End 1100.

7 July Trying here again 0930. No luck.

16 July Trying again, 1100. Complete census, all 3 Juv, all 4 adults seen well, had some chances for Juv. dominance, but no luck. End 1200.

21 Aug Watching 0845. Earlier, while at W Gate, I saw a nice juvenile dominance interaction in the top of the gate sycamore. ^{M / Grn-wh}
So at least 2 Juv still present 0900. Both J684 Grn-wh / Grn-wh
ad J686 ^{wh / Dgreen-BPIL (N)} M / BPIL-Black Flycatch from the W Gate sycamore.
0945, ♂626 or / DBLue-wh (N), ♂627 LGR-DBLue / M,
♀519 ^{BLK-Yellow / BLK} all seen quite well. Missing are
of course ♀601 who has apparently moved to 1500 (see
1500 18 Aug notes), and J685. J685 is the dominant
juvenile here, but I'm starting to wonder if he's still here.
1000 whoa, J685 shows up, ^{LBLue-Red / M} LBLue-Red / LBLue. So complete census.
Plus a couple of hints that J685 > J684 as suspected. J684
moved away a couple of times when J685 approached, and J685 even
took an acorn away from J684. End 1000.

10 Sept Well, J684 did not make it. Like J600 last year,
J684 was dead on road when I passed by at 1300.
He was in fairly good shape, although quite dry & stiff,
but I would guess that he was road killed this morning.
Also, seemed quite definitely in ♂ plumage.

Gate dominance

30 June, 1 July

dom	J685	J684	J686
J685	—	(3)	4
J684	0	—	3
J686	0	0	—

Melanerpes formicivorusGate

5 Oct Watching here + at W Gate, 1430-1630, I see ♀ 519 ^{BLK + Yellow / BLK}
 and ♂ 627 ^{LPK / DBLue}, plus others I didn't get good looks
 at. Storing has begun!

7 Oct complete census

2 Dec Counted stores: 640 Total!

12 Dec Watching here, 0930-1030. ♀ 519 ^{BLK - Yellow / BLK}, ♂ 627
 LPK - DBLue / Metal, both seen, and others. Furthermore, it turns
 out the "♂" 685 ^{LPK - Red / LBlue} is actually a ♀! Pretty
 sure, anyway. The Broken-top Live Oak in Square-nail
 Flat has a good crop of still-green acorns, and the birds
 were doing a bit of harvesting from it. (along with 10-15 Jays!)

14 Dec Watching here again, 0930, all I see are ♀ 519 and
 ♂ 627 again. Also, I found a fallen sycamore limb
 with about 250 usable storage holes, and 75 stored
 acorns. It was lying on the S side of Martin Road, ~~500~~ m
 east of the point directly underneath the 1981 nest hole.
 Not certain if this fell before or after my count on 2 Dec.

(check that! I just found 2 more branches
 near the same spot: About 150 usable holes and
105 acorns. So this was a serious loss to this
 group: Plus a few other odds + ends.

450 ~~storage holes~~ storage holes lost } all about mid-Nov -
200 ~~acorns~~ acorns lost, } early December

I think all this happened before my acorn count, as
 none of the branches I remembered from 2 Dec were missing.
 Also, most of the branches were covered with sycamore leaves
 and one was damp + moldy from lying on the ground.

1981

R.L. Mumme

Melanerpes formicivorusWestgateHastings Reservation12 Jan

A quick watch here at 1315, both adults present.
 ♂58 No leg, ♀599 Metal/LBlue-Red. ♂58 flycatching
 from top of sycamore.

17 Feb

Yesterday I noted that the main granary branch (long, low,
 overhanging the road) had fallen. Bad news for these guys.
 The limb was still pretty much intact & loaded with droons,
 so I prop it up against a partially fallen branch of a Valley
 Oak, 20 meters east of the granary sycamore. Perhaps they
 will still be able to use it.

11 Feb

Here at 1030, no sign that these birds have used
 the displaced granary limb. No sign that anyone else has
 used it either, though.

17 Feb

Granary returned to tree.

8 March

Quick watch at 1130. ♂58 ^{LGreen/LGrn} No leg, ♀599 ^{Red} Metal/LBlue-Red
 both here

4 May

Yet another quick watch here 1715. ♂58 ^{LGrn/LGrn}
 and ♀599 Metal/LBlue-Red in the granary. A couple of
 sortees to a tree upon Haystack Hill. ♂58 doesn't seem to
 be tightly following ♀599, but you never know.

9 May

at 1030, a bird looking out of the low hole (broken
 stub overhanging road), I believe a ♀. Will have to
 look in there soon.

23 June

Trying to watch for babies here 1330. I hear 1, and see some
 birds (sapping?) in a live oak just up the road from the granary.

28 June

Again 1715. 1820, ♂282 ^{M/Red-Tan} Tan-Red/Tan-Red intruding here,
 not chased by anybody. ♂58, ♀599, ♀692 all seen well, and almost
 certain that another juv here as well.

Melanerpes formicivorusWestgate

29 June Trying here 0715. This time I again see juv 692 clearly many times, and I see another juv down by Maggies. However, I read the bands on him as ^{Metal/Dark-whr}, which doesn't fit at all for J693, and perhaps was J684 from Eate.

30 June Here again 0545. Again, J692 pops upright away. ♂58 ~~seen~~ sapsucking briefly from a live oak in E Corral Field, 10 yds ~~to~~ W of Tree #145. ♀599 sapsucks from the Live Oak 30 meters up CV road from the granary. 0700, Pretty sure now that only 1 juvenile is present here, despite earlier impressions.

21 Aug Watching here 0730. ♂58 ^{Corn/Corn} No leg still hanging in here. looks fine. A ♀ and a Juv also seen, but no bands yet; 0830, ♀599 M/LBlue-Red, J692 ^{DBLue-LBlue/m} LBlue-DBLue/DBLue-LBlue both here as well. J693 must certainly be gone, not seen after loading. Lots of intruders here, though, 1 ♀WB, and at least one juv. intruder ^{Light-Dark/Metal} Orange/wht-yellow, which I think was probably J687 from ARF2. Confirm, he shows up again J687 ^{or Blk/Metal} Or-white/wht-yellow Chased out by J692. He's being awfully persistent here. I wonder if funny things have been happening at ARF2.

End 0840.

5 Oct Watching here ~~1440-1555~~ 1440-1555, complete census. ♂58 ^{Corn/Corn} No leg, J692 ^{DBLue-LBlue/DBLue-DBLue} DBLue-LBlue, and ♀599 metal/ all here. J692 may be molting into ♂ plumage, but I should check again in 2 weeks or so to confirm. It appears that these birds have not started to store yet.

** 6 Oct Purge J693, Not seen after Banding 8 June

Melanerpes formicivorusWestgate

2 Dec Complete census, ♂ 58, ♂ 692 seen well, ♀ 599 m / L Blue
seen fleetingly. Also counted stores: 180 total
Not very good! Still lots of "empties".

Melanerpes formicivorusRoad 1Hastings Reservation8 Jan

Start 1525. Granary census on reverse. 1550, evidence that ♂580 still dominates ♂577, as the latter appeared to chatter and give way (while working acorn) when ♂580 approached. 1645, ♂486 is conspicuously absent. ♂294, ♀269, ♀383, ♂577, ♂579, ♂580, ♀578 all seen well and repeatedly. End 1700, save for watching roosting. Roosting, nobody uses any of the dubious looking holes in the 1st granary, 2nd granary (sycamore), or the Valley Oak up the hill from the 1st granary. I do find a bird looking out of the old Starling hole in the sycamore next to the former 1980 nest tree. The hole is in a live branch facing the road.

12 Jan

After much worry, I finally see ♂486 M / D Blue-Orange. Everyone else seen here, except ♂294. Whoops, ♂294 also shows up. Complete census here.

14 Feb

Start Valentines Day watch 1420. Granary census on back. Like Rd 3, these guys may still be storing acorns. ♀269, ♂577, ♂579 all flew into the sycamore with Live Oak acorns. 1510, ♂294 does as well. Pretty slow, actually. ♂294, ♀269, ♀383, ♂577, ♂579 all seen very well, but nobody else. End 1555

9 March

A quickie watch here, 1130-1230. Good census, ♂486 M / D Blue-Orange. ♀269, ♀383, ♂577, ♀578, ♂579, ♂580 all seen well. Only ♂294 missing, but he's probably here. Beautiful day, lots of Flycatching.

22 March

Walter and I attach the Rd 1 nest hole back up in the big sycamore adjacent to the 1980 nest tree.

8 Jan 1980 / Road 1 granary census

1525 ♀269	1615 nobody
1530 ♀269	1620 "
1535 ♀269	1625 "
1540 ♀269 ♂577	1630 ♀269
1545 " "	1635 ♀269 ♀383
1550 " "	1640 ♀269
1555 ~~♂580~~ ♂580	1645 ♀269 ♀578 ♂579
1600 nobody	1650 " " "
1605 ♀383	1655 ♀269
1610 ♀383	1700 "

14 Feb 1981 Rd 1 granary census

Storage 1425-1555 90 m

1425 ♀383	1530 ♀269	① ♂294 1
1430 ♀269 ♀383	1535 ♀269	② ♀269 11
1435 " "	1540 ♀269	
1440 ♀269 ♀383	1545 ♀269	② ♂579 11
1445 ♀269	1550 ♀269	① ♂577 1
1450 ♀269	1555 ♀269	
1455 ♀269	1600 X	
1500 ♀269 ♂579	1605 ↓	
1505 ♀269	1610 ↓	
1510 ♀269	1615 ↓	
1515 ♀269	1620 ↓	
1520 nobody	1625 ↓	
1525 ♀269		

1981 R.L. Mumme

2

Melanerpes formicivorus

Road 1

28 March

A quick look here 1200. ♀269, ♀383 both here, does not look like ♂♂496 or 294 are hanging all over them. I guess they're not ready to nest just yet. ♂577, ♀578, ♂579 also seen well. 1300, ♂486, ♂580 added as well. ♂486 is definitely not following ♀269 yet. Is ♂294 gone?

29 March

I climb up here, secure the added nest hole, wood chip & sap

2 April

Start watch 0845. Nest hole construction going on in Black Oak near granary 0900-930 ♀269; 0935-1010, stop. 1005, 25 crows fly into the granary. ~~we~~ start eating acorns. Not much hope for defense, ♂486 continues to work on hole. I re-watch here. Not much chance of these guys nesting in the next few days, even if they did finish the hole. ♂486 seemed a bit interested in ♀269 (he was nearby during part of her hole excavation bout), but he certainly wasn't following her religiously. I thought I got a look at ♂294 but wasn't sure. His status should remain questionable.

6 April

Start 1035. Nest hole construction in the Black Oak near the granary proceeding rapidly. When I walked by after parking the truck, I saw ♂486 metal/ at the hole. Now, up on PO Hill, I see a bird totally in the hole. Moving tail feathers is all that I see. Getting deep. At 1101, a lot of action at that hole. ♂486 seems most involved, but ~~♀269~~, ♀269, ♀383, and another ♂ (perhaps ♂294) making visits there as well.

9 April

Start 0735. Still working on the Black Oak ~~hole~~ hole. No evidence of ♂486 following ♀269. ♂486, ♀269, ♀383, ♂294 (yes!) ♂577, ♂580 all seen well. ♂486 working hard on hole.



Melanerpes formicivorusRoad 1

12 April Start here 1000: Not ready to nest. I saw ♀269, ♀383, and a ♂ (486?) in the nest hole at various times, all throwing chips out. ♀269 seemed to be without escort by ♂486, and I later saw him more away from ♀269 on 2 occasions. A complete census, however: ♀269, ♀383, ♂486, ♂294, ♂577, ♀578, ♂579, ♂580 all seen well. Will watch here again 14 April, say? End 1120.

14 April Watching the hole under construction here at 1020. Yesterday I got a string up in the tree. 1045, I find ♀269 down by the 1980 nest area. When she flies back to the granary, she is followed by a unknown bird. Uh-Oh.

1135, ♀383 has just spent the last 1/2 hr in the new hole in the Black Oak, tapping away. Immediately after entering, she threw a few wood chips out. ♂486 followed her to the nest area or looked in a few minutes, then flew back to the granary. He may have "visited" briefly during this time.

1143, ♀269 goes to hole, with a ♂ (486?) following. In briefly, leaves with wood chips (a mouthful).

16 April Watching from my spot above the granary at 1300. Walter watched here this AM as ♀383 laid a runt egg and threw it out herself.

1410. Quitting for now. Just not getting anything. Complete census, but it looks like ♂294 is not really following ♀383.

17 April Start watch from PO Hill, after a short watch at the Black Oak nest hole here. ♀383 laid an egg here today, and has not thrown it out yet. Egg normal.

Road 1 16 April 1981

1315 ♀383 7890 in 2°g

1320 ♀383 ♀0 in 2°g / NE

1325 " " " " "

1330 nobody

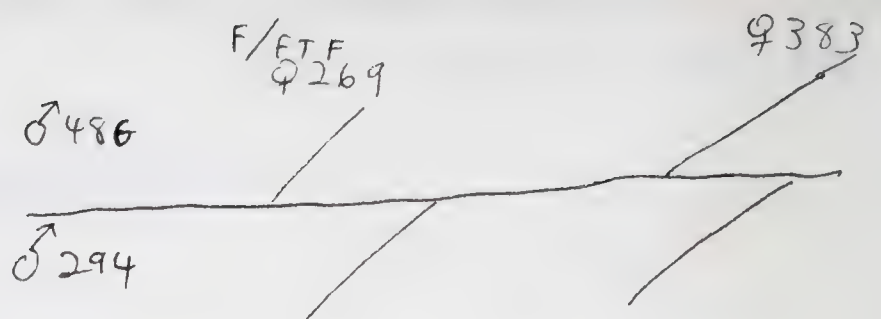
1335

1340

1345

1350 ♀383 1° / ♂294 ♀8 2°

1355



MAF

♀269

♀383

♂486

♂294

1981

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4

Melanerpes formicivorusRoad 1

(17 April)

1115, I started watching nest. ♀383 made one visit from 1130-1132. Relieved by Mary Peacock at 1135.

1155, I start watching from PO Hill. At 1222, I see ♀269 go into a hole in a broken stub at the very top of the large Valley Oak, 50 meters downstream of the burned 1980 nest tree. Throws out wood chips, 3-4 times. She leaves 1236. 1313, ♀383 enters Valley Oak hole. 1326, ♀269 + ♂486 fly to Valley Oak hole. ♀269 at hole, ♀383 looks out. ♀383 chatters. ♀269, ♂486 then return to granary. ♀383 in.

18 April

Starting watch from PO Hill at 0610. At 0620, ♀269 flies from granary to new Valley Oak hole. Looks suspicious at the cut (I opened the hole yesterday afternoon. Very thin walls, hole not held together by very much at all). Then hitches to the top of the stub, starts karritting. 0626, ♂486 looks into VO hole, ♀269 still at top of stub. 0630 0640, ♀269 in vicinity of Black Oak nest hole. 0645, ♀269 at hole, looking in. After ~~45~~ looking at hole, ♀269 enters at 0648! Leaves without egg at 0650.

0651 ♀269 enters again; ♂486 at hole (above) with ♀269. Immediately, ♀269 leaves carrying an egg laid by her sister, ♀383! Hot Dog! Egg carried to granary, left there (stored?), I think.

0655, ♀269 enters Valley Oak hole. Looks out at 0702. Back down 0705. 0710, ♀269 looks out

17 April 1981 Road 1

1155 ♂486 ♀269 ♂? 1^og
1200 ♀269 ♂577 1^og | ♂486 toward Valhalla
1205 ♀269 ♂486 ♂577 ♂580 1^og
1210 ♀383 ♂577 1^og
1215 ♀269 ♂486 ♀578 1^og
1220 ♂486 ♀269 nest area | others elsewhere
1225 ♀269 Valley Out hole
1230 " " "
1235 " " ? 1^og
1240 ♀269 ♂486 near water |

Break

1310 ♀269 ♂486 ♀383 ♂580 1^og |
1315 ♂486 ♀269 (VOnest area) ♀383 (nest) |
1320 ♀383 (VOnest) |
1326 " " " |
1330 " " " | others elsewhere
1335 " " " "
1340 End watch

0615 ♂486 ♀269 1^og
0620 " " VOnest area |
0625 " " " " | NI
0630 " " " " | NI

	♀269	FTF	MAF
17 April	HTT		1
	HTT		
18 April	HTT		1

♀269 prelops to
♂486 //

Melanerpes formicivorusRoad 1

(18 April) 0712, ♀269 back down. 0715, looks out. Back down. 0720, 0723, ♂486 enters, too, 0726 ♀269 leaves)

(During this bout - 0655 - 0726, ♀269 laid an egg)
0730, ♀383 enters "upper" hole of the two usable holes in the 1° granary. 0734, ♀383 leaves, ~~0736~~

→ 0736, I spot an egg wedged in at the very top of the most western (downstream) branch of the 1° granary. ♂580 pecking at egg.

0744, ♂577 now sucking juices from egg (egg is still round and in good condition, just one bill hole). ♂486 also seen using egg. Egg stored point end down, wedged into an avil area.

0843, ♂577 back in granary, eating part of egg material (yolk or white). 0846, ♀269 seen eating egg! sucking (lapping?) albumen out of egg. 0915, ♀269 returns to feed on egg immediately followed by ♂577.

→ 0918, ♀269 seen in top of 1° granary, manipulating (eating, I think!) a bit of egg shell from another egg (This was the other ♀383 egg thrown out by ♀269 that I didn't see. Refer to Walter's notes). Definitely not the egg in the top of the granary, as it is still intact.

0926, ♂486 sucks on egg (intact) for several seconds. Sticky, "white" readily visible on bill as he laps it up.

0928, ♀383 enters "upper" 1° granary hole again. In just for 15-30 seconds.

This was
marked egg
in previous
trial

1981

R.L. Mumme

6

Melanerpes formicivorusRoad 1

(18 April) 0934, ♀383 eating a bit of her own egg in the granary!
 → cracking the egg a bit as she inserts her bill to the bottom of the egg. 0938, ♂577 egg sucks some more

0938 ♂486 on top of Valley Oak nest stub, I suspect ♀269 inside. 0940, ♀383 enters the Valley Oak nest hole. ♂486 then enters as well.

0942 ♀269 leaves nest, ♂486 leaves too (??)

0944 -- ♀383 leaves Valley Oak nest, carrying egg laid ^{earlier in the} ~~that~~ morning by ♀269!!!!
 Great! ♀383 left very slowly + deliberately, and carried the egg to the tall vertical branches at the very top of the ^{big} sycamore near the 1980 nest area (the sycamore in which we placed the artificial nest hole this year. About 40-~~40~~ 50 meters). ♀383 immediately "stores" the egg in a storage hole. Great!

0945, ♀383 returns to Valley Oak hole, enters, looks out, backs down several times.

→ 0955-- ♀269 in top of the sycamore, pokes hole in the "stored" egg (her own egg!), and starts to suck out albumen for a few seconds. Fantastic! ♀269 then flies off. Stop for awhile at 1000.

1025, Back at the watch at PO Hill. Both eggs still in place (one (♀383) 1st gr, top branch, one (♀269's) sycamore top. The one in the 1st gr looking a bit torn up.

1030 "Business as usual" in the 1st granary. ♀269 +

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7

Melanerpes formicivorusRoad 1

(18 April) ♀383 working acorns next to each other in the granary, with no sign of any aggression whatsoever.

1036, ♀383 returns to Black Oak nest (empty) enters

1050. Egg in 10 granary now totally demolished. No sign of it. No birds have returned to the sycamore where ♀383 "stored" ♀269's egg.

1100 End memorable watch. Raining now.

So, to wrap up!

① 3 eggs were tossed. ♀269 tossed two of ♀383's. ♀383 tossed one of ♀269's!

② All were eaten or stored. However, they all became the communal property of the group, as many different birds fed on the eggs, and the tossers showed no defense of the egg in any way.

19 April Start watch at 0615 in rain from PO Hill. ♀269's egg (tossed by ♀383) from 18 April still in storage hole in sycamore, but largely eaten & broken up. 0730 Bluesbirds 0735, ♀383 lays in Black Oak Hole (Fide Walter).

♀269 lays in U. Oak hole { 0808. ♀269 enters Valley Oak hole, with ♂486 in attendance. ♀269 had been at the Black Oak nest tree, but seemed bothered by the presence of the Rope & Rope ladder, which Walter left partially up

0810 ♀269 looks out 15 sec

0814 ♀269 leaves,

flies to sycamore where tossed egg was "stored yesterday"

♂577 eats some fragments of the egg. ♀383 eats some of the eggshell & remains.

1981

R.C. Mumme

8

Melanerpes formicivorusRoad 1

(19 April) 0820, ♀269 + ♀383 2-3 inches apart in top of sycamore in 1980 nest area. No aggression whatsoever. Leave 0830.
End 1015.

→ Check nest in Valley Oak, ♀269 did lay just after 0808 in the Valley Oak. Egg measured, measurements read to Walter. While I check, Janet sees ♀269 toss ♀383's egg from this morning, and carry it to the 1^o granary. Suspected to have been eaten.

Valley Oak hole watched rest of day, no visits, no egg tossed.

20 April Start from Hide at Black Oak hole at 0606. Mary Pearock is watching simultaneously at the Valley Oak hole.

0659, ♀383 enters, flies out with wood chip after 5 seconds.

0705, ♀383 enters. ♀269, ♂486, ♂577 all in vicinity

♀383
lays

of hole. 0709, ♂294 looks in, flies off after 30 sec

0714 ~~0714~~ ♂294 enters nest. ♂294 leaves at 0715. ~~0714~~

0720 ♀383 leaves.

0724 ♀383 enters. 0739, ♀383 garricks twice

from inside the hole, in response to wakas from granary.

toss
by
♀269

~~0745~~ 0745, ♀269 at hole, ♀383 leaves, ♀269 enters and leaves immediately (< 2 seconds) carrying the egg laid by ♀383 1/2 hour before. Egg carried

to anvil perch of 1^o granary, placed on horizontal branch

0748 ♀269 returns, enters nest hole. 0749, ♀269 leaves

egg
eaten

At least 2 different birds seen feeding on egg at 0750.

Both ♂♂ ♂486 plus another.

0811 ♀269 in hole for about 10 seconds

Melanerpes formicivorusRoad 1²⁰
(19 April)

0830 ♀383 enters nest. leaves 0833.

0850 ♂294 enters, leaves <10 sec.

0915 ♀269 enters nest. 0919, ♂486 enters, 0926

♂486 leaves 0929 ♀269 looks out, ♀383 comes to hole, wakas exchanged, no aggression. ♀269 leaves, ♀383 enters. 0940, ♀383 leaves.Nest check, 0940 - 1000. 1 egg laid by ♀269
25.2 x 19.4 were measurements. Many reports
nothing at Valley Oak hole.1040, on PO Hill, I search the anvil in the 1^o granary where I saw ♀269 place this morning's tossed egg. No evidence, but then ♂580 manipulates a large piece of eggshell, then eats (?) a bit, End watch 1100.Roosting, I find ♀269 and a ♂ (486?) in the 1^o granary as I arrive. Later, another ♂ shows up. Some confusion, one ♂ attempts to mount ♀269, but the other ♂ flies down to the branch, and no copulation occurs. (As always, the ♀ mounted the ♂ first). After some more milling around, the birds took off to the 2^o granary as a unit of 3.Doesn't make much sense if ♂486 is ~~not~~ having exclusive contact with the ♀ during the day.21 April

Start watch at nest 0640. A bird in the hole as I walk up.

0646 ♀383 enters. leaves 0655 (laid egg?).

0701 - 0710, ♂486, ♀269, ♀383, ♀269, all look in, don't enter.

0718 ♂? (294?) enters. 0719, ♂594 replaces. ♂579 leaves 0720.

0728 ♀269 enters. leaves 0734

0747 ♀383 enters. 0752 ♀269 replaces. 0801 ♀269 comes

1981

R. L. Mumme

10

Melanerpes formicivorusRoad 1(21 April)

0812 ♀383 enters. Leaves 0821

0828 ♀383 enters. Leaves 0832, ♂♂ 294 & 578 enter

Both ♂♂ leave by 0840. 0845, confusion. ♂486.

♀269, ♂486 in hole. Is ♂486 no longer following ♀269?

0854 ♀383 enters; 0905, ♀269 replaces ♀383,

0919 ♀269 leaves. 0920, Going to check nest.

~~0945~~ 0945, well, too bad. Only one egg laid, marked #2 and measured 25.0 x 21.0 mm. Don't

know who, but seems too wide for ♀269. On the other hand, it seems like ♀269 was more likely to lay, since ♀383 has already cracked out 5 eggs before today. Will have to check Walker's records of ♀383 egg dimensions.

22 April

watched roosting, without seeing much. ♀269 was escorted tonight in the granary by a ♂ (presumed 486) with no others around. No mountings seen. ♀269 roosted in the upper of the 2 holes in the granary.

25 AprilRoosting at the nest. A ♂ was in the hole (I thought ~~♂~~ ♂486) when a 2nd bird with M band lower left (♂486, ♀269?) came to the hole, entered. Chattering then one bird flew out. In short, I don't know who roosted in the nest.26 AprilRoosting, this time ♂486 roosted for sure. I picked up his lower left metal band when he flew into the granary, then followed him all the way to the nest hole, replacing a ♀.28 AprilRoosting, ♀269 (I think) was in the hole, but she was relieved by a bird with a lower left metal band. Thus ♂486 roosted in the nest.4 May

Struck out at roosting. A very late exchange. Couldn't see anything.

5 May

Checked the nest at 1530 Hatching! 3 Babies, 5 eggs

Melanerpes formicivorusRoad 1

(5 May) Eggs # 1, 3, 5, 7, 8 were still present, meaning eggs # 2, 4, 6 had hatched! I marked the 3 babies with magic marker all on the right wing + leg. One of the babies was quite large, suspect it hatched yesterday.

16 May Roosting, and pretty certain I saw some metal band as the bird entered, meaning ♂486 roosted in the nest.

6 June Start watching above granary 1015, looking for ① Juvenile dominance ② Signs of re-nesting.

As for ②, Looks unlikely. ♀269 Flycatching, working stores in the granary + quite a bit, nobody nearby. DBln - Lbrn / metal
Babies seem to be up toward Valhalla, J673
Seen already.

1140. Well, the juvs are keeping much too low a profile to accomplish much today. ♀269, ♀383, and all 4 1st yr birds seen will. J671 M / Blk-LBlue seen up above Valhalla, End.

9 June Watching here 0730-0830. Babies still keeping a very low profile. None seen today, though I suspected some were up by Valhalla. Will have to try again. ♂486 + 269 seen, meaning adults are all here.

12 June Start watch 1400, windy afternoon, probably little chance of finding babies. 1530, as I said, not a good day. I did find J672 LBlue / DBLue-yellow (N) DBLue-yellow (N) / M, plus ♀269, ♀383, ♂486, ♂577, ♀578, ♂580.

15 June Trying again above granary, 1215. 1415, Zero again. As I leave I flush J673 + J672 out of the sap tree live oak behind the granary, but no trace of the other babies. ~~May~~ Where are they. Maybe I'll try early tomorrow.

Melanerpes formicivorusRoad 116 June

Start 0530. What do you know, dominance, finally! 0545, ^{DBrn-Lbrn/M} ♀383 feeding J673 in the granary, ^{Metal/Blk-LBlac} J671 flies in, gives J673 a sharp peck to the head. 0820, Sheer boredom after that. J672 seen briefly later, but that's all. J670 has not been seen since banding. Will have to check the nest before too long to see if he made it out.

21 June

Watching above granary 0515. 0540, A bit of luck, I think. Pretty sure I saw J672 peck at J673, while J673 was being fed by adults in the granary.

24 June

Once more 0700. 0845, Finally, up by Vallhalla I see ^{CBln/LDBln-Yell (N)} J672 ^{DBrn-Lbrn/M} peck at J673 twice! good! ♂577 was nearby, but not feeding, when J672 flew to where J673 was. gentle pecks, but J673 showed submissive head turn, crouch, + chatter.

J670 must certainly be gone. I would have seen him by now, otherwise. I'm also starting to worry a bit about J671, not seen in quite some time (well, a week).

1000, Hanging around a bit more, definitely only J672 + J673 seem to be around. Maybe I do have a complete dominance table here.

30 June

Checked the nest hole at 1600 to see if all the babies made it out. Apparently so. No trace of any juvs in the nest hole.

1 July

Trying here 0710. Looks indeed like J672 + J673 are the only ones left. 3 more mild dominance interactions, J672 mildly but definitely pecking at J673, twice in the VO, once in the sycamore. 0820, whoops, J672 77 J673 again, this time about 6 hard pecks to the head, in the granary, with ♂580 nearby, about to feed J672. End 0900

J671 7 J673 I
672 7 . 673 ~~III~~ III

1 July J672 7 J673 IIII

dom	sub	
	672	673
672	-	7
673	0	-

Melanerpes formicivorusRoad 1

5 Aug

Start 0700. J672

LBlue / DBlue-Yellow (N)

seen right off the

bat in the Sycamore. Very white eye, and it looks like it

might be in male plumage. ♀383

Yellow-DBrn/Yellow

in the 1^o granary.

and ♂486

DBLue-Or/Wht-Or

appears

Even ♂294 shows his seldom

DBLue-wht (N)/white

seen face,

B Pink / DBlue-Yellow

♀269

in the 1^o

granary, and ♂579 orange/orange in the holey VO above the granary.

Birds still doing a bit of sapsucking from the live oak behind (downhill)

the granary. Even a wrenit in the sap tree. 0800, ♂577

Blk-BPnk/

Shows up in the granary.

Four birds I watch fly over the crest

of Poison Oak Hill, for God-knows what reason. I immediately

though, the granary is full of Finch intruders: ♂501

Yellow w/ m

Lbrn/Yellow,

♂542 LBlue-Or/LBlue,

♂540 DGreen/LPink

Lots of chasing,

mildly by ♀383, then ♂486 returns, and there followed a very

bitter scrap, with grappling, involving ♂♂. For added

confusion, here at the same moment was ♀567

Red/Red

m/Red

From A1 entered the territory here virtually simultaneously

with the Finch ♂♂. Could she be moving into Finch?

The Finch ♂♂ looked very interested in the acorn situation here, which is still very good.

0830, Bedlam! A full scale revolution, dare I say, except that I know there are no breeding vacancies here. Probably just expansionist tactics by Finch birds. ♀541

also turned up here.

Blk-Yellow/Mauve

0850, things starting to calm. Rd 1 appears in control. The only other bird I saw during all this was J673 who also was still in ♂/Juv Plumage, so perhaps it is still too early to tell. It does make me wonder a bit about ♀578 + ♂580.

Melanerpes formicivorusRoad 1

(5 Aug)

If they were around, this certainly should have brought them out of the woodwork, unless they are off exploring.

0900, speak of the devil, ♂ 580 ^{wht/BLK} m/BLK shows up, open-wing wakaing with everybody in the 1^o granary. ♀ 578 is still missing, however. 0915, Pretty much all over here, save for the usual post-revolution friendliness, open-wing wakas, etc. Ent watch.

Note: Finch is out of acorns, which probably had something to do with that invasion.

16 Sept

A quick pass here 1530. There are still a few acorns present in the granary. Nobody in any holes, but I did run

across ♂ 294 ^{BPink/DBlue-yellow}, ♂ 580 ^{wht/BLK}, and ♂ 579 ^{wht/m}. Whoa, also J672 in ♂ plumage!!

Another ♂!

1 Oct

Start watch 1400. Granary census on back. Storing has begun here, but not really in earnest. Only a few new acorns. I'm also quite certain that they did not run out. 1600, very slow

afternoon. ~~the~~ Helpers 577-580 all seen, ♀ 383, (perhaps ♀ 269), and J♂ 672 only birds seen. Very little action in the granary, only one acorn seen stored.

6 Oct

Another granary census, 0800-1000. ~~Granary census~~ Lots of storing action this time, although the pace slowed to a near stop toward the end. Good census, all 4 helpers, ♀ 383 ♀ 269, ♂ 486 all seen. Only ♂ 294 and J673 missing. The latter, not seen since 5 Aug, is perhaps gone for good. Will leave him on the field list for the time being, though.

**

GROUP UPDATE: Purge; J671 disappeared about 19 June ± 2 days Last seen 16 June, certainly gone by 21-24 June.

1 October 1981

Road 1 granary census

1400 nobody	1505 ♀ ⁵⁷⁸ ~~578~~ 2°g nobody 1°g
05 "	10 " "
10 "	15 ♀578 1°g ♂579 2°g
15 "	20 ♀578 2°g nobody 1°g
20 "	25 " "
25 "	30 ♀383 ♂672 ♂579 2°g
30 ♂580 2°g nobody 1°	35 ♀383 ♂ ? 2°g
35 nobody	40 ♀578 ♂ ? 2°g
40 nobody	45 nobody
45 "	50 "
50 "	55 ♂580 ♂ ? 2°g
55 "	1600 nobody
1500 ♀ ~~578~~ 2°g nobody 1°g	

defense

1515 ♀578 flicker 3

storage

♂577 ① .5/hr

6 Oct 1981

Storage

defense

0800 ♂580 1°g	♂580 IIII	④ 2/hr	0818 Aw?? ? 3
05 ♀578 ♀383 2°g	♀578 IIII	⑨ 4.5/hr	0825 flicker
10 ♀383 2°g	♂577 II	⑦ 3.5/hr	♂486 2
15 ♂579 1°g	♂579 II	② 1/hr	♂580 2
20 ♂672 ♂579 2°g	♀269 I	① .5/hr	0843 Unid passerine
25 nobody	♀383 IIII	④ 2/hr	♀578 269 1
30 ♂486 2°g ♂580 1°g	♂ ? II	②	0850 Flicker
35 nobody	♂486 I	① .5/hr	♀383 2
40 ♀383 1°g ♂580 2°g	♂294 I	① .5/hr	
45 ♂577 2°g			
50 ♀383 ♀578 1°g ♂577 2°g			
55 ♂577 ♀383 1°g ♀578 2°g			
0900 ♂577 580 ♀269 578 1°g ♂486 672 2°g			
05 ♀269 2°g			
10 ♀383 1°g			
15 nobody			
20 ♂580 2°g			
25 ♂579 2°g			
30 ♀383 1°g			
35 nobody			
40 ♀383 ♀578 1°g			
45 ♀578 2°g			
50 ♀578 2°g			
55 ♀578 2°g			
1000 ♀578 2°g			

31 stored in 2 hrs

15.5 / hr

Melanerpes formicivorusRoad 1

16 Oct Start watch 1100-1300, granary census + storage data on reverse. Complete census: 4 breeders, 4 ad helpers, and J672 all seen very well. Confirms that J673 has indeed disappeared. A moderate amount of acorn storage, and a lot of flycatching on a beautiful warm day.

20 Oct Another storing + acorn census. Data on reverse. Everyone seen, except ♂294. A bit of storing, but mostly flycatching on a nice warm day.

30 Oct Watching again 0820, granary census below, + storage data

0820 nobody	defense	Storage
25 "		
30 "	0845 ♀269 2 Unid Pass	♀383 IIII IIII III (13)
35 ♀269 ♀383 1°	0850 nobody 0 Plain Tit	♀269 IIII IIII (10)
40 ♀269	0852 ♀269 2 Plain Tit	♂579 IIII IIII II (12)
45 "	0959 ♀269 2 Un. Pass.	♂486 IIII IIII I (11)
50 nobody		♂577 IIII IIII IIII (15)
55 ♀269 ♀383 ♂486 1°		♂580 I II (3)
0900 ♀269 ♀383 ♂486 ♂577		♂294 I II (3)
05 ♀383 ♂579 ♂486		♀578 II (2)
10 ♂486 ♀383 ♀269		♂672 I (1)
15 ♂577 ♀383		
20 ♂486 ♀383 ♀578		
25 ♂486 ♀578 ♀269		
30 ♀383		
35 nobody		
40 ♀269		
45 ♀269		
50 ♀269 ♂579 ♀578		
55 ♀269 ♀383 1° ♂486 ♂294 2°		
1000 ♀269 1° ♀578 ♂486 2°		
05 ♂486 2°		
10 ♂580 ♀269 1°		
15 ♂486 ♂579 ♀578 ♀269 ♂672 1°		
20 ♀578 ♂577 1°		

47 23 = 70

after 1st hr

70, 35/hr

(47 in 1st hour)

Complete census, everybody seen well. Plus, a new worlds record for storing activity 70 total acorns in the two hours, 47 alone in the first hour.

Almost harvesting seemed to occur up by Valhalla.

16 Oct 1981 Rd 1 granary census 1100-1300

1100 nobody

05 ♀269 ♂580 ♀578 2°
 10 ♀383 ♂577
 15 " "
 20 " " ♀578 ♂577 2°
 25 ♀383 ♂577 ♀578 ♂580 2°
 30 ♂672 ♀578 2° | ♂577 1°
 35 ♂577 ♂580 1° | ♀578 2°
 40 ♀269 1° | ♂486 ♀383 ♂580 ♂577
 45 ♀578 ♂577 1° | ♂580 ♀269 2°
 50 ♀578 2° | ♂577 1°
 55 ♂580 2°
 1200 ♂578 ♂294 2° | 1°
 05 ♀383 1° | ♂580 2°
 10 ♀269 ♀383 ♂580 1° | ♂486 2°
 15 ♀383 1° | ♂380 2°
 20 ♀269 ♀383 ♂577 2° |
 25 ♂577 1° | ♂486 2°
 30 ♀383 ♂577 ♀578 ♂577 ♂672 1° | ♂580 2°
 35 ♀383 ♂577 ♂577 1° | ♂580 2°
 40 ♀578 ♂577 ♂486 2°
 45 ♂580 ♀578 2° |
 50 ♂577 ♂294 2° |
 55 ♀383 1° | ♂672 2°
 1300 ♀269 1° | ♀578 ♂580 1°

Storage

② ♂580 11
 ② ♀269 11
 ② ♂577 11
 ③ ♀383 11
 ② ♂577 11
 ③ ♀578 11
 ③ ♂486
 ③ ♂294
 ① ♂672 1

15 in 2 hrs 7.5/hr

defense

1235 ♀383 und passerine 2

20 Oct 1981

1110-1310

1110 nobody

15 ♀383 ♂577 2°
 20 ♂580 ♀383 ♂577
 25 ♀383 ♂486 ♂580 2°
 30 ♂580 ♀269
 35 ♂577 ♀383 1° | ♂580 ♀578 2°
 40 ♂577 ♂580 ♀383 1° | ♂577 2°
 45 ♂577 ♂580 1° | ♀578 ♀269 2°
 50 ♂577, 577, 580, ♀269 1° |
 55 ♂577 ♂577 1° |
 1200 ♂577 1° | ♂580 ♀383 2°
 05 | ♂383 ♂486 ♂577 2°
 10 | ♂580 ♀269 ♂486 2°
 15 | ♂577 ♂580 ♀269
 20 | ♂580 2°
 25 | ♂580 2°
 30 | ♂486, ♂580 2°
 35 | ♀269
 40 | ♀269 2°
 45 | ♂486
 50 ♂577 1° |
 55 ♂577 1° |
 1300 ♂580 1° | ♂577 2°
 05 ♂577 1° |
 10 ♂577 1° | ♂486 ♂577 ♀478

Storage

♂577 III 1
 ♂580 III 1
 ♂486 III 1
 ♀383 V
 ♀578 I
 ♂577
 ♂672
 ♂294
 ♀269

21 10.5/hr

defense

1255 ♂577 Flicker 3

Melanerpes formicivorusRoad 1

9 Nov Start granary census, 1400. Details on back. 1530, Geez, what a bore! No birds let alone storing. Only ♂580 and ♂294 seen fleetingly, then ♂579. Cutting it short 1545.

4 Dec Counted stores, 1045:

<u>Valley Oak</u>	--	<u>1500</u>
<u>Sycamore</u>	--	<u>950</u>
TOTAL	--	<u>2450</u>

12 Dec Another try at a granary census, 1055 - 1255.
A little better! ♀♀ 269, 383, and ♂♂ 577, 579, 580
all seen well and repeatedly, but nobody else. A
grand total of 3 acorns stored.

9 Nov 1981 Rd 1 granary census

1405 - 1605

1405 nobody
10 "

15 ♂580 2°

20 nobody

25 "

30 "

35 "

40 ♂294 2°

45 nobody

50

55

1500

05

10

15

20

25

30

35

ma ♂579

no storing

no defense

40 ♂579

45 ♂579

50 -

55 -

1600 -

05 -

DUD!

11 Dec 1981 Rd 1 granary census

1055 nobody

1100 "

05 "

10 "

15 ♀383 ♂580 1° | ♂♂577, 579 2°

20 ♀269 2°

25 ♀383 2°

30 nobody

35 ♀383 1° | ♂579 2°

40 ♀269 1° | ♂580 ♀383 2°

45 nobody 1° | " "

50 ♂577 ♀269 1° | ♀383 ♂580 ♂579 2°

55

1200 ♀269, ♀383 1° | ♀269 2°

05 ♀269 1°

10 "

15 ♀269 1° | ♀383 2°

20 nobody

hr 1 . hr 2

♂577 1 : (1)

♀269 1 : (1)

♂579 1 : (1)

♀383 : #

25 nobody

30 "

35 "

40 "

45 cut

50 short

55

(3)

1.5/hr

Melanerpes formicivorusFinch7 Jan

Pretty good watch, 1500-1620. ♂63, ♂66, ♂282, ♂500, ♂540, ♀541, ♂542, ♀543, ♂613, ♂616 all seen well, and I also probably saw ♀614 ^{DGrn-BRk(N) DGrn} but I should try again tomorrow. Conspicuously absent was ♀500. I'll look for her tomorrow.

12 Jan

Well, it wasn't "tomorrow", but I get in a very good watch. All of the above birds, a good look at ♀614 ^{DGrn-BRk(N)/DGrn} " " /metal, Absent once again was ♀500. I feel that she may have "cashed her check", moving on, dead, or just temporarily wandering and not present.

19 Feb

Foggy afternoon, I sneak in a quick watch here. ♂282, ♂501, ♂540, ♀541, ♀543, ♂616 all here, seen well. Not a great census, birds not doing much. No evidence of a new ♀ yet.

9 March

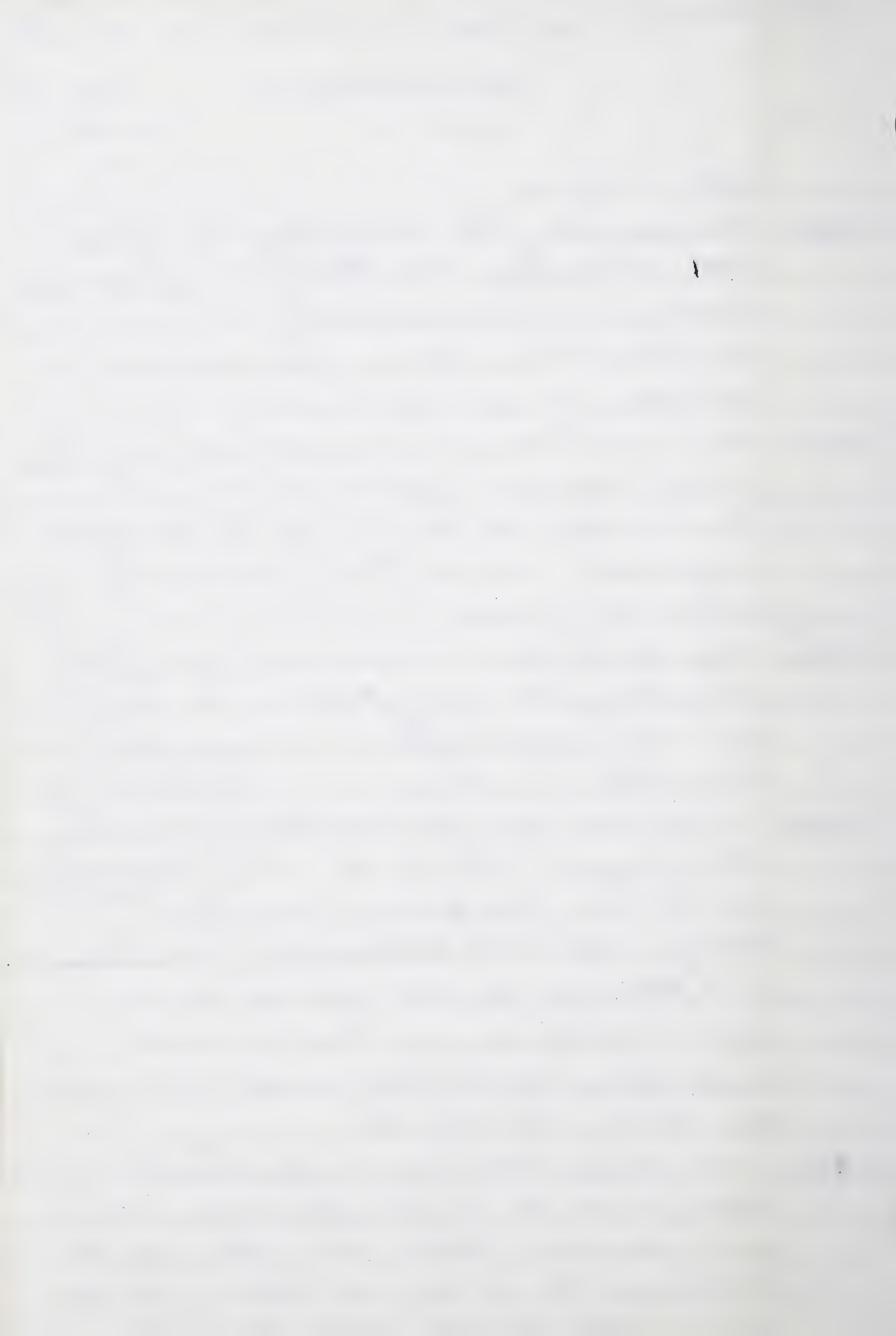
Very good watch here, 1030-1130. ♂63 Grn-BRk/Grn-BRk, ♂66 Red/LBne-wht, ♂282 Tan-Red/Tan-Red, ♂501 LGrn/Yellow, ♂540 ^{DGrn/LPnk} M/LPnk, ♀541 ^{LBne-Or/LBne} BRk-yellow/Mauve, ♂542 " " ♀543 DGrn/DBlue, ♂613 Red-DBlue/metal, ♀614 DGrn-GRNCA/N, and ♂616 M/Yellow-DPnk all seen very well.

Lots of flycatching from VO on Arnold side of creek.

Complete census, except for ♀500, who must certainly be gone. End 1130. No new ♀ yet.

16 March

I swing past early (0900) no sign of a power struggle. At Roosting, it looks like the entire group is roosting in the sycamore 1980 nest tree. Confusing, but it looked like most (8+) roosted in the nest hole, one roosted in a hole above it, and one roosted in one of the two holes that overhangs the road.



1981

R.L. Mumme

2

Melanerpes formicivorusFinchHastings Reservation

- 21 March Roosting here, after some last-minute moving around, 9 birds roosted in the nest hole (1980). 2 birds were in a hole about 3ft above the nest hole for a while, but late, one flew away (to where?) and another flew to the nest hole, becoming the ninth bird.
- 28 March Swing by here at noon, no sign of power struggle and/or new ♀ yet. ♂66, ♂540, ♀541, ♀543, ♀614 all seen. No ♂542
- 3 April Ambush set at the 1980 nest hole, but only 2 roost there. Two roost in a hole above, and 1 roosts in a hole below. I don't know where ~~any~~ everyone else went. Ambush cancelled. OK?
- 6 April A swing by here 1245, no revolution yet.
- 12 April No action here 1100.
- 14 April A quick look here, ♂63, ♂66, ♀543, ♀614, ♂501 seen here. No revolution yet.
- 21 April No sign of revolution activity or nests at 1030.
- 23 April Finch birds in acorn-bearing Live Oak at Gate (see Gate notes)
- 30 April Start watch here 1300 to see if a ♀ has snuck in here, (like one did at Gazebo). ♀614 Narrow/metal, But that's all. Very little action here at all.
- 7 May Start 1100. Uh-Oh, a ♂ looking out of '80 nest hole. ♂501, ♂66 seen, will have to look here again.
- 9 May Swing past at 1015. Nobody in the '80 nest hole this time. ♀543 Down/DB here, and no sign of a new ♀. 1025, ♂282 pecks at ♂540!! ♂63, ♂66, ♂501 also seen. ♂501 also pecks ♂540.
- 18 May Quick look here 10-1100 ♂63; ♂66, ♂282

Melanerpes formicivorusFinch

(18 May) ♂501, ♀543, ♀614 all here. No sign of a nest, new ♀, or revolution activity. ♀543 sapsucked once from the live oak by the parking lot.

27 May See Fanny Arnold notes: ♀641 intruding there (!).

12 June A quick look here at 1600, ♀541 ^{Blk-yellow / Maune} in the Valley Oak granary. Also ♂540.

16 June Another look at 0940 produces ♂613 Red-DBlue / m, who hasn't been seen in a long time.

24 June ditto at 0700, ♂542 LBlue-or / LBlue.

20 July A full blown watch here, starting 0900. ♂63, ♂66, ♂282, ♂501, ♂540, ♀541, ♀543, ♀614 all seen quite well.

Birds are doing some sapsucking from the agrifolia overhanging the parking spot on the SW side of the road.

→ 1020, ♂501 chatters vigorously to ♂282, when ♂282 flew to ♂501 in the sycamore granary.

1040, ♂542 also present. 1050, ♂66 drinking out of a Valley Oak "well", in the medium sized Valley Oak directly across the creek from the sycamore granary.

1100, Looks like ♂613 (who was here 16 June) and ♂616 (who hasn't been seen since I saw him intruding at Gate), are missing. I might bet that ♂613 is still around, but ♂616 is likely to be gone. 1110, well, didn't take long to be proved correct. ♂613 seen in the "flycatch" Valley Oak on Arnold side of the road. Seemed to be chasing somebody, but I never saw the leg of the chased bird.

5 Aug Finch birds intruding at Rd 1 (see Rd 1 notes). Birds here are virtually out of acorns. ♂63, ♂66, ♂282 here as well.

Melanerpes formicivorusFinch

16 Sept Very quiet here when I walk by at 1515. Nobody in hole, no birds around.

20 Oct An extraordinarily good census here, 1000-1100. Everybody seen, including ♂616, who hadn't been seen since April and who I had give-up on long ago! Birds seen: ♂66 ♂63, ♂282 ♂501, ♂540, ♀541, ♂542, ♀543, ♂613, ♀614, ♂616.

Lots of flycatching activity, and a little bit of storing going on.

2 Dec I continue to do well here: I drive up at 1245, and by 1300, I've seen all 11 birds (same as above). No sign of a new ♀. birds are active storing Live Oak acorns in the valley oak.

Counted stores

Valley Oak	<u>470</u>	
North sycamores	<u>130</u>	
Main sycamore	<u>280</u>	
South sycamore	<u>25</u>	
TOTAL	~~905~~	<u>905</u>



1981

Ronald L. Mumme

1

Melanerpes formicivorusRoad 3Hastings7 Jan

Start 1120. Granary census on back. These guys are still storing acorns, and they seem to be gathering live oak acorns from the "creek side" of the road, about 50 meters downstream from the granary. Everybody (except ♂538, of course, certainly dead) seen well. Last hour I take storage data. All dark, agrifolia acorns. End 1320. ♂68, ♂184, ♀265, ♂537, ♀539, ♂618, all here.

11 Feb

Start 0805. Granary census on back. ♀265 looking out of 1980 nest hole as I arrive. 0820, a ♂ also in the hole with her. 0830, everybody emerges from roosting. Only ♂537 seemed to be roosting in another hole. 0835, everybody out, but (presumed) ♂184 still looking out of 1980 nest. Emergence sequence was ♀265, ♂68, ♀539, ♂618, ♂184, with ♂537 apparently elsewhere. ♂184 also seen well, so census already. 0930. Believe it or not, these guys are still bringing in acorns and storing them. Looks like agrifolia. ♂184 & ♂618 have done it for sure, I suspect others as well. ♀265 does storage data on back. Again, live oak acorns are coming from the creek side of the road west (toward Finch) of the granary. End 1005.

16 March

Start 0900. Granary census on back. ♀265 ^{DBLue / Yellow - LBlue} 0910, ♂184 & ♂68 fly into VO granary, the ♂68 approaches ♂184, → ^{♂68} chatters to ♂184, as ♂184 was extracting an acorn bit. 0939, → ♂184 pecks at ♂537 on a storage limb. So he still dominates the 1yr old. Granary census interrupted by bulldozer work. ♂184, ♂68, ♂537, ♂618 all seen well. ♀539 conspicuously absent. No following/guarding of ♀265 yet. End 1130

Road 3 granary census 7 Jan 1981		acorns stored	1220-1320	♀265	♂184	♂68	♂537	♀539
1120	♂537 ♀539		1225	♂184, ♂68	III	III	III	III
1125	♀539 ♂184 ♀265 ♂537		1230	♂537 ♀539		III		I
1130	♀539 ♂618 ♂184 ♂?		1235	♂68 ♀539			II	
1135	♀539 ♂184 ♀265		1240	♀539 ♂68		III		
1140	♂68 ♀265 others		1245	2 birds				
1145	♂68 ♀265 ♂537		1250	♂184 ♀539				
1150	♂184 ♂618		1255	♂68 ♀265 ♂184 ♀539				
1155	one bird		1300	one bird				
1200	♂68		1305	♂68	♂184	(13)		
1205	♂68 ♀265		1310	nobody	♂68	(5)		
1210	♀265		1315	~~♂68~~ ♂618	♀265	(5)		
1215	♀265		1320	♀265 ♂184 ♂68	♂537	(7)		
1220	one bird			♂618	♀539	(6)		
					♂618	(0)		
						(36)		

60 minutes storage down

Road 3 granary census 11 Feb 1981

0805	~~♂618 ♀265~~ (in 1980 nest)	910	♂184	0805-0830, all birds still in roost holes in sycamore	
0810	" "	915	♂184 ♂618 ♀265 ♀539		
815	♀265 in 1980 nest, at least one other	920	♂184 ♀265 ♂618		
820	" "	925	♂184 ♀265	Storage 0935-1005	
825	♀265 ♂ in 1980 nest	930	nobody		
830	everybody	935	"	(4)	♂184 III
835	♂184 ♂68 ♂618 ♂537 ♀539	940	♂537	(2)	♀265 II
840	♂184 ♂537	945	♂186	(1)	♂68 I
845	♀539	950	♀539 ♂537	(1)	♂618 I
850	♂618	955	♂537	(2)	♀539 II
855	nobody	1000	♂537	(2)	♂537 II
900	"	1005	nobody		(12)
905	♂68				

30 min

Road 3 Granary census 16 March 1981

0900	♀265	1005	♂184 ♂537
0905	nobody	1010	♂184 ♂537 ♀265
0910	♂68 ♀265	1015	♂184 ♂537 ♂68 ♀265
0915	♂68 ♂184 ♀265	1020	♂184 ♂537 ♀265
0920	nobody	1025	dozer
0925	"	1030	
0930	♂68 ♂184 ♀265	1035	
0935	♂184 ♀265	1040	
0940	♂184, ♂537	1045	
0945	♂184, ♂537	1050	
0950	♂184 ♂537	1055	
0955	♂184 ♂537	1100	
1000	♂184 ♂537		

bulldozer activity

Melanerpes formicivorusRoad 3

28 March Start 0905. Looking for following of ♀265, sign of a nest(?) and ♀539. 0950, ♀265 flies off, ignored (not followed) by ♂184. ♂68, ♀265, ♂537, ♂618 all seen well, so ♀539 is most likely gone, disappeared March 1 ± 2 weeks. No following, no interest in nest holes. 1000, Take it back, ♀265 flies into granary. 2 ♂♂ right behind her. 1005, ♀265 flies to 1980 nest hole, enters briefly, leaves with woodchips. 1030, she appears to be working on a hole in the Valley Oak granary, in the live horizontal limb that overhangs the road. End 1130. In summary, these guys look like their starting to get interested in nesting. Will have to watch here again soon. Whoa, ♂184 looks a bit at another hole start at the base of the lower granary limb in the Valley Oak.

1 April Start 1545, cold, drizzly day. ♂ looking out of the 1980 nest hole as I pull up. 1600 - 1625, ♂537 & ♂618 alone in the granary area. It was ♂537 in the nest hole. ♀265 here earlier, may have been followed by both ♂♂. They could be getting ready to do it. Anyway, these 2 helpers Failed to Follow (FTF) ♀265. 1626 ♀ flies in, good double follow. 1641 ♀265 enters hole, I think ♂537 already in. He exits. 1648 ♀265 in alone. 1650, ♂68 at nest either he or ♂618 enters at 1651. 1703 ♂68 leaves nest. 1730, ♂537 in nest alone. 1738, ♀265, ♂537 enter confused and leave 1820.

28 March 1981 granary census, mate guarding, Road 3.

1000 ♀265 2♂♂

1005 " " NI

1010 " " NI

1015 " " NI

1020 " " I

1025 ♀265 ♂184 | ♂68 ♂618 ng

1030 core 3 NI granary

1035 " "

1040 " "

1045 " "

1050 core 3 I

1055 core 3 I

1100 ♂184 ♂618 g |

1105 core 3 ♂618 g | I

1110 " " NI

1115 ♂68 ♀265 ♂618 g | I

1120 " " NF

1125 core 3 ♂618 g | I

1130 " " NI

1 April 1600-

Mate guarding

1600 ♂537 ♂618 g | core 3 elsewhere

1605 " " NI both ♂♂ follow ♂184 alone

1610 " " NI ||| ♂184

1615 " " NI ♂68

1620 " " NI both

1625 ♂537 ♂618

1630 all 5 granary

1635 all 5 ind g | I

1640 all 5 g | NI (juvs-roosting?)

1645 " " NI 4RS!

1650 all 5 g NI (♀ in hole, ♂68 at hole)

1655 all 5 g NI (♀ in hole, ♂68 in hole)

1700 " " " " ♂537 also with ♂68

♂184 perched nearby. Not sure about ♂618

1705 all but ♂618 g (♀265, ♂537 in hole I

1710 " " NI

1715 ditto ♀265 out of hole

1720 ♂68 ♂184 ♀265 ♂537 (in hole) g | NI

1725 all 5 g | NI

1730 ♂537 ♂618 g | core 3 elsewhere (together for this one) I

1735 ♂537 ♂618 g | NI others elsewhere

1740 ♂537 in hole ♂618 v g | NI

1745 " " "

1750 " " "

1755 all but ♂68 g |

1800 ♂537 ♀265 in hole, ♂184 hear g |

1805 ?

1600-1800
120 min

1981

R.L. Mumme

3

Melanerpes formicivorusRoad 32 April

Start 1045. They are still harvesting acorns from the area SW of the granary. 1120, ♀265 enters ¹⁹⁴⁰ nest hole, ♂68 goes to nest, leaves at 1022. 11024 enters again, leaves with wood chips. 11030, ♂184 enters alone, tosses out wood chips. ~~11050~~ 1150 ♀265 enters nest again, followed by ♂184. 1158, ♀ leaves, sits on entrance to nest. 1205, ♀265 flies off, ♂68 follows immediately, ♂184 follows 5 sec later, leaving nest. I don't think they have eggs yet, but I'd bet they will soon. 1336 ♂84 enters hole, leaves 1340. End watch.

3 April

Egg-tossing experiment. A good plaster egg placed in the nest hole at 0630. Nest was empty. Ready + watching by 0650. Birds (at least 4) were still in the roosthole when I arrived at 0620. That is, they were all roosting in the "nest."

567 from
H1 intruding
→

0801 ♂537 entry; 803 out; Leaves 806. 0820 ♀ intruder I read as Metal/Red. Perhaps ♀567 from H1? A ♂ NB chased her 184, 0835.

925, ♀ at hole, looks in a lot, then leaves w/c entering. Shit!

1104, Same(?) banded ♀ intruder, chased actively by ♀265 1120. I'm giving up! ♀ hasn't been in hole.

4 April

→

Check nest at 0930, and fake egg is gone! It weighed 5.80 g, by the way. Was removed between 1130 yesterday and 0930 today. Successful experiment. Still haven't laid yet, though I have to think that they will soon. I'll check again tomorrow.

2 April 1981

Storage

Follows

FTF

MAF

Time	Observation	Storage	Follows	FTF	MAF
1045	♂618 g	11	♂184		1
1050	" " / NE	1	♂68		
1055	nobody		both		
1100	all 5 g				
1105	nobody	11	♂537	1	1
1110	?	1	♂618	1	1
1115	all 5 gran.	265 11			
1120	all but ♂537 g		♀ approaches 184	1 (I think!)	
1125	all 5 g NE				
1130	all 5				
1135	all 5				
1140	all 5				
1145	all but ♂618 g NE				
1150	" " " "				
1155	♂184 ♀265 in nest, ♂68 ♂537 near	g I	♂618 may have been in nest		
1200	♂184 in, ♀265 at nest	g NE	nucleus of this foot		
1205	" "	" "			
1210	nobody	♂618 in nest			
1220	nobody				
1225	♂184 ♂68 ♂418 g	♀265 g I			
1230	core 3 ♂537 g				
1235	♂537 ♂618 g I	core elsewhere			
1240	Nobody				
1245	"				
1250	"				
1255	nobody				
1300	♂184 alone near nest		flow in to chase titmouse		
1305	nobody				
1310	nobody				
1315	nobody				
1320	nobody				
1325	nobody				
1330	core 3 g				

Follows

FTF

MAF

Time	Observation	Storage	Follows	FTF	MAF
0940	nobody				
0945			♂184		
0950			♂68		
0955			both		
1000			♂537	1	
1005			♂618		
1030	♂537				
1035	Nobody				
1040	"				
1045	all 5 hr				
1050	?				

Melanerpes formicivorusRoad 3

5 April Checked "nest" at 1745, still nothing. Added poor egg mimic (dice) at the same time. Will watch here tomorrow,

6 April Start 0825 after a foggy morning. ♀265 looking out of the "nest" hole as I arrive. Don't see anyone else, so they may be still at roost. Yes, everyone leaves at 0835. Actually, I see only the core 3 for sure. 0900, ♀265 enters nest briefly, leaves with a touch of ~~wood~~ wood shavings. Could the egg die be gone already? 0925, she enters, ~~also~~ leaves with nest material again. 0935, ♂184 enters nest very briefly.

Big question: Where are ♂537 + ♂618? Both couldn't have died since 3 April? Are they wandering together, participating in a revolution somewhere, or what? 0948, ♂618 shows up briefly, eats a corn, then flies off up toward PO Hill.

End 1000. I still doubt that these guys laid eggs today, but it sure seems like it should be soon! I'll try tomorrow.

7 April check nest at 1630, Empty. Meaning ① Dice was indeed tossed out (I even found it underneath the top limb of the 2^o (Valley Oak) granary. Neat! since I'm sure I would have seen it in yesterday's visit, I presume that it was heaved out between 1000 6 April and this afternoon. Tossed within 48 hrs (I'd guess within 24 hrs)

8 April Start 1200: 1218 ♀265 enters nest, tosses sawdust. ♂184 enters 1220. ♀ leaves 1230, ♂♂ follow immediately, ♂537 + ♂618 ETE. Still interested in hole, but I'd bet no eggs yet. End 1235

Rd 3 6 April 1981

		Follows	FTP	FAF
0845	core 3 g			
0850	core 3 g NI	♂68		~~4000g phase~~
0855	core 3 g I	♂184		1
0900	core 3 g I	both	11	
0905	core 3 g NI	♂68		1
0910	" " " "			
0915	" " " "			
0920	core 3 g I			
0925	core 3 g NI			
0930	" " " "			
0935	" " " "			
0940	nobody			
0945	nobody			
0950	"			
0955	"			
1000	"			

0845-1000

75 min

Rd 3 8 April 1981

		Follows	FTP	FAF
1200	All 5	♂68		
1205	♂618	♂184		
1210	♂618 ♂537	both	11	
1215	all 5	♂537		1
1220	all 5 (♀265, ♂184 in nest)	♂618		1
1225	all 5			
1230	♂537, ♂618			
1235	all 5			

1200-1235

35 min

Melanerpes formicivorusRoad 3

- 9 April Checked nest 1545. Still no eggs. Getting tired of this.
- 10 April Another check 1530. Would you believe still no eggs?
- 11 April Start watch here 0800. Looks like ♂♂ are still following ♀265, so at least they haven't nested elsewhere yet.
- 0820, Very strange, a Stellers Jay near me gives a very good imitation of an Acorn Woodpecker excited harrit. Never heard that before. 0835, ♀265 at hole, but does not enter. 1046, ♂537 looks in as well. 0850, core 3 arrives, ♀NB intruder in the sycamore "perch" tree (not granary). ♀265 does not chase. 0906, ♂618 briefly enters nest.
- 0915, Not much interest in nest hole today. Could they be planning to nest elsewhere? If so it would be likely to be along the creek S or W of the granary, as birds seem to spend a lot of time over there.
- 12 April Peeped in at 1730. Still empty. Getting very tired.
- 13 April Lets try another watch, starting at 1000. 1030, ♀265 enters nest. They're still interested, Leaves 1033. End 1100. They've got to nest in that hole soon!
- 1730, nestcheck. I peep in and hallucinate 2 eggs, then reach in and find the nest empty once again.
- 14 April Nestcheck 1700, peeped in. Empty.
- 16 April Nest check at 1200. Peeper reveals nothing. I'll have to watch here again, *soon.
- 17 April whoops! Nest check at 1820, 2 eggs! They've finally done it! It also means I missed an egg on my check yesterday, but no matter. Watched roosting here as well. Not unexpectedly, the 3 core members came in

11 April 1981

Rd 3 granary census, association, + mate guarding.

		F	FTF	MAF
0800 nobody	—	♂184		
0805 core 3 ♂618 granary area	—	♂68		
0810 nobody	—	both ♂♂		
0815 ♂618 g	—			
0820 core 3 g	—	♂537		
0825 core 3 ♂537 g	—	♂618	1	1
0830 ♂537 g	—			
0835 core 3 ♂537 ♂618	—			
0840 nobody	—	♀265 approaches,		
0845 nobody	—	open wings ♂184		
0850 ♂537 g	—			
0855 core 3 ♂537 g	—	♂68 approaches		
0900 core 3 ♂618 g NF	—	♀265 open wings		1
0905 " " " "	—			
0910 ♂537 ♂618 g	—			
0915 nobody	—			
0920 nobody	—			
0925 ♂618 g	—			
0930 nobody	—			

0800 - 0930 90 min

13 April 1981 Rd 3

		F	FTF	MAF
1000 Nobody	—	♂184		
1005 " "	—	♂68		
1010 all 5 g area	—	both ♂♂		
1015 core 3 ♂537 g I	—	♂537		1
1020 all 5 g area I	—	♂618		
1025 core 3 nr gr ♂618 ♂537 g	—			
1030 core 3 ♂537 g I	—			
1035 core 3 g	—	♀265 pre-cop to		
1040 core 3 ♂618 g	—			
1045 ♂537 g area	—			
1050 ♂618 ♂537 g core elsewhere	—			
1055 ♂537 alone g	—			
1100 ♂618 alone g	—			

1000 - 1100 60 min

Melanerpes formicivorusRoad 3

(17 April) to the 2^o granary as a tight pack early, But nothing much happened. ♂184 + ♂68 mounted each other several times (especially after the ♀265 went into roost hole), with no sign of aggression at all. One ♂ attempted to mount the ♀, but there was a scuffle + jumble, and no copulation took place.

18 April Nest check 1730. 3 eggs, the one laid today marked #3 and returned

21 April Nest check 1015 - 4 eggs, bird in the hole as I arrived, clutch complete. Egg measurements

① 25.8 x 19.8 } first 2
② 25.5 x 20.0 }

③ 24.7 x 20.1 3rd (laid 18 April)

④ 25.2 x 19.7 4th (laid 19 or 20 April)

23 April Nest checked. 4 eggs, plus I introduced a plaster egg (measurements, weight at right) at 1530.

3 x 20.6

6.10 g 25 April Checked nest here 1200. Plaster egg (not surprisingly) is still here! Good. Removed it, introduced one die (die) into the nest. Still 4 good eggs. N=1

27 April Nest checked 1100. Still 4 eggs, plus one warm die (♀ was in when I arrived). Good! They did not throw out the die. N=1

1 May Byron reports Rd3 young have hatched by this morning!

23 May Banded 3 very heavy young w/ Walter

31 May Here at 1710, thinking that I was going to be watching for dominance interactions among the juveniles. It looks like

1981

R.L. Mumme

7

Melanerpes formicivorusRoad 3

31 May 1981 One baby is still in the nest, and ♂537 + ♂618 seem to be feeding fledglings (although none seen) in the P.O. Hill area. The big news is however, These guys have /or will have a 2nd nest! ♂184 + ♂68 are (as usual) tightly following ♀265 around. Also, she has been in (with ♂♂ following) a nice low hole facing the road, just below the "ladder crotch". May already have an egg or two. If not, soon!

→

Also, I saw a not-bad dominance interaction between ♂68 + ♂184. ♀265 flew to the 1st nest hole + entered (both ♂♂ followed, and were standing side by side at the hole entrance, when ♂184 gave a quick gentle peck to the head of ♂68. ♂68 then chattered for a few seconds.

1 June

Nest check (the "new" hole) 0830. Sunovagan, 1 egg, most likely laid this morning. I forgot to take my pen up (not smart), but the egg had no air cell, a nice "track" around the widest part of the egg, and a smudge in the middle. Also, a baby was still in (looking out) of the first nest, so these guys overlapped nests (if by the barest of margins.)

2 June

Nest check 1745. 2 eggs, and I'm pretty sure that I recognized egg #1 and egg #2 would have to have been laid today. Nobody in the first nest, and Mary reported nobody in the nest when she watched yesterday.

Watched through to roosting. Looks like both ♂♂ still following the ♀ around. However, ♀265 looked like she might have been bothered by my opening up the 2nd nest hole.

Melanerpes formicivorusRoad 3

(²~~1~~ June) and she seemed to be spending a lot of time in the 1st nest hole. Hope she doesn't split her clutch. Nothing really interesting seen, behaviorwise. However, I did see J654 ^{LPk/LBlne} " / metal and J656 Red-wht/D Blne.

3 June Start 1045. Looks like ♀ following breaking down. ~~1004~~ 1110, I saw ♂184 really jump on ♂618 when the latter was in the top of the sycamore working acorns. Another case of young birds being "excluded" from the granary? 1145, Actually, it looks (like last year) that ♂68 is still fairly enthusiastic about following ♀265, but ♂184 does not seem to care about her.

Nest check 1200. 3 eggs, the one laid today marked #3 and returned.

4 June Nest check 1345 4 eggs. #4 marked + returned. A bird incubating when I arrived, so clutch may be complete.

5 June Nest check 1215. Still 4 eggs, so unless a late one goes in tomorrow, I'd say clutch was complete as of 4 June. Will check again + measure eggs in a couple days.

9 June An inauspicious start watching here 0930-1115. Complete dominance table (!) (see reverse), all interactions seen in the big Valley Oak in the PO Hill flat. Only the dom. Juv (655) seen in the granary. complete census as well, J655 really nailed J654 hard, while 654 > 656 and 655 > 656 were more gentle taps. Only in the 2 654 > 656 cases was an adult present and feeding (feeding 654). Sehr Gut! Would like to have others watch here to increase sample.

9 June 1981 Rd 3 dominance

all seen in tree (V.O.)

in flat adjacent to PO Hill

side of road, near turn-around.

dom	655	sub 654	656
655		2	2
654			2
656			

Melanerpes formicivorusRoad 3

(9 June) I also saw a dominance interaction between ♂537 and ♂618. They were together on one of the Valley Oak storage limbs, when ♂537 gave ♂618 a gentle tap on the head. ♂618 chattered and covered slightly.

11 June Finally get around to checking the 2nd nest & measuring the eggs here. Still 4 eggs, and it looks like all might hatch

① 24.9 x 19.5 laid 1 June (possibly 31 May)

② 24.4 x 20.1 2 June

③ 24.7 x 19.9 3 June

④ 24.7 x 19.4 4 June

Expect hatching to commence 13-14 June.

13 June Nestcheck, 1815. 4 eggs, no hatching yet.

14 June Nestcheck 1445. still 4 eggs, no hatching yet.

15 June Nestcheck 1415. Synchronous hatching! All 4 eggs have hatched, presumably early today, so an 11-day (exactly) incubation period.

21 June Nestcheck 1615. 4 babies doing well. 6½ days old

Or-Brn 30.5 g calmen 11.2 wing 14.1 eyes closed
small tips to feathers

Or-LGrn 29.0 10.1 13.3

DPnk-DBlk 33.0 11.0 15.0

NB 27.5 g 9.3 12.7

25 June 1700 Nest check

Or-Brn 47.0 g 15.4 21.4 2 2

Or-LGrn 46.5 g 13.2 21.3 1 1

DPnk-DBlk 51.0 g 14.7 23.8 4 2

NB 42.0 g 12.2 19.8 1 1

eyes of all just starting to open, feathers just pinning out

Melanerpes formicivorusRoad 3

<u>30 June</u>	Nestcheck 1430	wt.	culmen	wing total / next	6 th 1 ^o	central rectrix
	Or - Brn	67.5	18.5	48 / 33	21	16
	Or - Lbrn	68.0g	17.6	41 / 29	18	13
	DPnk - DBlue	73g	18.0	54 / 32	25 mm	16
	NB	62g	15.9	41 / 31	16	12

All 4 babies fine. Traces of red on the head, eyes fully open 15 days old.

8 July Nest check + banding

709	Or - Brn	75g	23.1	91	64	41
708	Or - Lbrn	73g	20.6	84	59	44
707	DPnk - DBlue	80g	21.1	92	64	44
710	NB	66.5g	18.2	82	61	44

707 709 710 708 crown hierarchy



710 pecked at 708

19 July

Watching for Juvs here 1300. Now, I find J654 Lnk/m over on "the Flat" in the Big Valley Oak (30 meters east of granary, on Pothill side of road). Looks like he's closing in on adult plumage. He still looks like a ♂ so it still may be too early, but his eye is getting quite light.

1500. Complete census of adults and 1st brood fledglings, plus new juvs 709 ^{3Pnk - Dbrn (N)/m} and 710 ^{Dbrn/metal}

Took me quite a while to track them down, but both were along the road close to Finch, in the area where the birds were a lot during 1979.

21 July

Again, 0700-1000. 3 Juvs, 708, 709, + 710 all seen, but again no sign of J707. I watched about an hour here yesterday, and didn't see him then, either.

Melanerpes formicivorusRoad 3

(21 July) No dominance action seen, as I was trying to watch a bit at both the granary and the PO "flat". When I first arrived, a ♂ intruder that I didn't recognize (Black / brn Blk (?)) was here being chased. Also a Cooper's Hawk today.

24 July Starting 0810, 1110, Nothing much to report

27 July Start 0845, 0920, where, virtually non-stop action here for awhile. Basically I confirmed the dominance ranks of the first brood babies, and saw one certain J709 > J708, (+ 3 probable: J709 was definitely pecking hard at another Juv behind the ~~tree~~ granary. About 5 min later, after some goings & comings, J708 emerged from that spot (whereupon J709 pecked at J708). Also a probable J709 > J710. About 4-5 birds, including the three first ~~year~~ brood juvs, in the upper limb of the two Valley Oak storage limbs. Pretty sure I saw one Juv of the second brood (dark eye) peck hard at a second Juv, which flew down to the low VO limb. The latter turned out to be J710, and up until that time I had seen only J709 on the upper limb. Not great, but a not unreasonable inference. Also, a few First brood juvs > 2nd brood, and adults > first brood.

Summary on back. End ~~11~~ 15. Complete census, 5 ad, 6 juvs.

5 Aug watching here 0945. ♀265, ♂68, ♂537, ♂618, J654, J655, J656 J708, J709 all seen well. Two interbrood interactions: J656 > J709, or J654 > J709. That's about it.

7 Aug watching here 0840. (0740). Pretty slow. ♂184 + J710, who weren't seen 5 Aug both here. In fact, a

Rd 3 27 July

5 Aug

654 7 709

(1) 2
(1)

655 7 656 III

655 7 654 I

654 7 656 II

656 7 709 I

655 7 709 II

655 7 710 I

709 7 708 I (III probable)

709 7 710 (I)

617 7 655 I

♂68 7 655 III

♂68 7 656 I

♂68 7 654 I

	655	654	656	709	708	710
655	—	I ②	III ②	I		I
654		—	II ②	(1) 5 Aug		
656			—	I (1) 5 Aug	I (2) 5 Aug	
709				—	I (III)	(I)
708					—	
710						—

19 Oct

Melanerpes formicivorusRoad 3

(7 Aug)

a nearly complete census, only Juv. 655 not seen. I also got another hint that J709 $\rightarrow$ J710, as J709 charged right past J710 to be fed by an adult, with no protest from J710. End 1030 (0930) whoops, J655 shows, so Complete Census - 5 adults, 6 Juveniles (J707 is of course, gone).

28 Aug

Start 0735. Lots of strange goings-on when I arrive. Seems like one or more intruders were hanging around on the periphery. I heard garricks on a couple of occasions and an occasional chase in the granary area, though I was never able to ID any intruders. The residents here were all quite active, unusually so: ♀265 was especially hyped up. She was flying to other group members, tail-raising, open-wing wakas the works.

0820, things calm now. ♂68 harvests a Black Oak green acorn (presumably), and works it in the VO. J710 begs from ♂68, ♂68 feeds J710. Well, complete census: 5 adults (♂68, ♂184, ♀265, ♂537, ♂618), 6 Javs (634, 655, 656, 708, 709, 710). And Believe it or not, it looks like J634, J655, and J656 have all acquired adult ♂ plumage. White eyes, look glossy, etc. They certainly should have molted by now, so I can only conclude (tentatively) that they are ♂♂.

0920, very quiet now. I did see one juv. dominance interaction, J656 > J708 (very mild), but nothing else. End 0915.

16 Sept

A walk past 1500. No body in any holes. No birds period. These guys appear to be finally out of acorns, which probably explains why no birds are around.

Melanerpes formicivorusRoad 3

2 Oct Granary watch 0800-1000 on reverse. Storing just getting started, now. Two interesting points: ① ♂184 is excavating a roost/nest hole (as if they need another one) in the sycamore branch overhanging the road. I hope that doesn't come to pass, as it would require an extension ladder placed smack in the middle of the road to get to. ② Birds are drinking from a tree well in the Valley Oak granary; Easy to see because of the heavy dark stain streaming down the side of the tree from it. All 5 adults, ♂654 655, 656, J708, 709 seen. Only J710 not seen: Perhaps gone

6 Oct GROUP UPDATE:

Purge J707 -- Not seen after banding, 8 July

15 Oct Granary watch, 1045 - 1245. Assuming that J710 is indeed gone, another complete census. A fair amount of storing, entirely by helpers + juvs. Birds showing a lot of interest still in that new roost hole overhanging the road.

dom 19 Oct Granary census below, 1400-1600 dom ♂687 J655
7097 708(?)

1400 ♂710 ♂655 ♂537	25 ♂537
05 ♂537 ♂618	30 ♂537
10 ♂537 ♂618 ♀265	35 ♂618
15 " " ♂655	40 ?
20 ♂655 " J709 J708 ♀265 45 nobody	
25 ♂618 ♂537 ♂655 708 ♀265	50 "
30 ♂68 ♂654 ♂618 ♀265	55 "
35 Game warden - discount 1600	"
40 J709 ♂68 ♂537	
45 ♂618 ♂537	
50 ♂ " "	
55 ♂68 ♂618 J709	

1500 ♂184 ♂68 ♂618 ♂654
05 ♂618 ♂709 ♂654
10 ♂656
15 nobody
20 ♂618

defense

1530 ? ? 3

Storage

②	♂655	11
②	♂618	11
⑤	♂537	11
③	♀265	11
⑤	J709	11
③	J708	11
①	♂654	1
①	♂656	1
①	♂184	1

23

11.5/hr

Road 3 granary census

2 Oct 1981

0800 - 1000

0800 ♀265, ♂184 |
 805 ♀265 J708 |
 10 ♂654
 15 ♂537 ♂654 |
 20 ♀265 ♂537 |
 25 ♂184 ♂656 ♀265 |
 30 ♂184 ♂537 ♂655
 35 ♂184, J709
 40 ♂537
 45 ♂537 ♂68
 50 ♂537
 55 nobody
 0900 ♂618
 05 ♂68
 10 nobody
 15 ♀265 ♂68 ♂618
 20 ♂184 |
 25 nobody
 30 ♂537
 35 ♂537 ♂184 ♀265
 40 nobody
 45 nobody (Cartsyfartsy airy fairy zenslithead near)
 50 ♂184 ♂655
 55 nobody
 1000 ♂618 ♀265

defense

0805 J708 2 Unid passerine
 0815 ♂68 3 Flicker
 0830 ♂655 1 Starling
 0845 ♀265 2 Intruder?
 0845 ♂537 1 Bl. Phoebe ♂184 hole excavation

0820 start

0835 end

Storage

♂537 IIII HTT (9)
 ♀265 I (1)
 ♂68 IIII (4)
 ♂184 III (3)
 ♂618 IIII (3)
 J709 II (2)

♂537 0848 start
 0849 end

♂618 0958 start
 1000 end

22 1/2 hr

11 per hr

Granary watch

15 Oct 1981

1045 ♂537

storage

defense

50 ♂537 ♀265
 55 ♂537 ♀265 ♂618

♂618 IIII (2) 1/hr

1100 ♂618

J♂654 HTT IIII (8) 4/hr

05 ♂618 ♂654

J708 HTT HTT (10) 5/hr

10 ♂654

♂537 LHTT IIII (8) 4/hr

15 ♂537

J♂655 IIII (3) 1.5/hr

20 ♂654 ♂655, others

J709 II (2) 1/hr

25 J708 ♂654 ♂655

♂656 I (1) .5/hr

30 ♂655

? IIII 34

35 J709 ♂654

38 19/hr

40 ♀265 ♂654 ♂537 J708

45 ♂68, others

50 ♂68, ♂654, ♂537

55 ♂184 ♂537 ♂618 ♀265 ♂564

1200 ♂184 ♀265 ♂655

05 ♀265 ♂184

10 ♂537 ♂618 ♂654 ♂655

15 ♂537 ♂708 ♀265

20 ♀265 ♂618 ♂656

25 ♀265 ♂656, J708 ♂618

30 J709 ♂537 ♂618

35 ♂618

40 J708 ♂654

45 ♂654 ♂655

Melanerpes formicivorusRoad 3

(19 Oct)

The most interesting thing was that J710 ^{White / D Pink} ~~Dark~~ / M actually is here, and in ♀ plumage. Only saw her briefly when I first arrived, but I was quite certain.

A complete census

21 Oct

Another granary census, 0800-1000. Details on reverse.
0820, ♀710 ^{Wht / DPnk} eating grit from below the sycamore.

A fair amount of storing action but no defense. Everybody seen but ♂618. He should be around, certainly.

30 Oct

Another watch here, ~~1045~~ 1045 - 1245. A real storing frenzy: 69 in the two hours; Most of the acorns came from the PO Hill side of the road, a few from the Big Valley Oak next to the campsite. Complete census, except (once again) ♂618 not seen again! Starting to worry about him.

6 Nov

Again, 1415 - 1615.

1415 ♂537 ♂708 ♂709 ♂184

20 ♂184 others

25 ♂656 others

30 ♂656 ♂654 ♂708

35 ♂68 ♂656 ♂708

40 ♂184 ♂656 ♂709

45 ♂184 ♂656 ♂708 ♂68 ♀265 (all working on grain)

50 " " " ♂537

55 ♂708

1500 ♂184 ♀265

05 ♂184 ♀265

10 " "

15 ♂184 ♂68

20 ♂68

25 ♂68

30 ♂68

35 ♂184

40 ♂184

45 ♂184

50 "

55 "

1600 "

storage	(1)	(2)	Total
♂537	111		(4)
♂184	11	1	(3)
♂709	111		(3)
♂708	411		(5)
♂656	11		(2)
♂655	1		(1)
♀710	1		(1)
♀265	11		(2)
u	11		(3)
	23	1	

24 in 2 hrs

12 / hr

complete census, save for ♂618, who must certainly be gone.

Road 3 granary census

21 Oct 1981

0800-1000

0800 ♂537

05 ♂537 ~~111111~~ ♂184

10 ♂537 ♀710

15 ♂537

20 ♂537

25 nobody

30 ♀710

35 ♀710

40 ♂654

45 nobody

50 "

55 "

0900 "

05 "

10 ♀265, 710

15 ♀265

20 ♂68 ♂184 ♂654

25 ♂537 ♂654

30 ♂184 ♀265

35 nobody

40 ♀710 ♂537 ♂655

45 ♂537 ♂709 ♂708

50 ♂654

55 ♂537

1000 ♂537

cum.

8 hr

storage

♂537

1111 1

28

♀709

1111 1

15

♀710

1

1

♂184

11

6

♂654

1

10

♂618

1

7

♀265

1

5

Unk

1111

♂708

1

14

23, 11.5/hr

♂68

4

♂655

5

♂654

2

breeders	old helpers	1st brood	
♂184 6	♂537 28	♂654 10	708 14
♂68 4	♂618 7	♂655 5	709 15
♀265 5		♂656 2	710 1
5/bird	17.5/bird	5.67/bird	10/bird

30 Oct 1981 1045-1245

1045 ♀265

50 ♀265 ♂655 ♂537

55 ♂656

1100 ♀265 ♂68

05 ♀265 ♂708 ♂184 ♂537 ♀710

10 " " " " " "

15 ♂656 ♂655 ♂68 ♀265

20 " " " " " "

25 ♂537 ♀265 ♂184 ♂655

30 ♂537 ♂68

35 ♂46 ♂537 ♀265 ♂654

40 ♂537 ♂654 ♂656

45 ♂708 ♂709 ♂184 ♂655

50 ♂537

55 ♂537 ♂654 ♂184

1200 nobody

05 "

10 ♀265 ♂708

15 ♂537 ♀265

20 " ?

25 ♂655 ♂656

30 ♂654 ♂68

35 ♂655 ♂708 ♂68

40 ♂537 ♂68 ♂656

45 ♂656 ♀265 ♂655

Storage

♂184

11

111

(5)

♂68

11

1

(3)

♂709

111

111

(6)

♂654

1111

111

(7)

♂537

1111

1111

(18)

♂655

111

1111

(7)

♂656

11

111

(5)

♀265

11

1

(1)

u

1111

1111

(10)

♂708

11

1111

(7)

31

38

69

69 / 34.5/hr

Defense

♀710/1110 2 unia Passerina

1 1128 1 Stellers Jay

Melanerpes formicivorus

Road 3

4 Dec Counted stores, 1000:

Valley Oak 460

Sycamore 1150

Total 1610

14 Dec Granary census, 1050 - 1250. A little bit of storing activity (Live Oak acorns, of course). Also, birds are still doing a bit of excavation on the hole overhanging the road.

I'm afraid they may be serious about nesting there.

Complete census, except ♂♂ 708 + 709 (and 68)

14 Dec 1981 Rd 3 Granary census 1050 - 1250

1050 nobody
 55 ♂655
 1100 ♀265
 05 ♀265 ♂68 ♂656
 10 ♀265 ♂68 ♂656 others
 15 ♂184 others
 20 ♂537 others
 25 nobody
 30 ♂655
 35 nobody
 40 ♂68 ♂656 others
 45 " " "
 50 ♂537 ♀265
 55 nobody

1200 nobody
 05 "
 10 ♂68 ♂184
 15 ♂184 ♂68
 20 " "
 25 ♀265 ♂537
 30 ♀265 ♂656 ♂68
 35 " " "
 40 ♀265 ♂68
 45 ♂537, others
 50 " "

storage		
1st hr	2nd hr	
♂655 11		(2)
♂537 1	11	(3)
♂68 1		(1)
♀265 1		(1)
		(7)
		3.5/hr

Melanerpes formicivorusSchool HillHastings Reservation

22 Jan A successful ambush in the 1980 (2nd) nest hole, catching ♀604 and ♂86, whose blood we were after. I had to open up the nest hole and pull them out, as both birds were lying extremely low, hunkered down at the bottom of the nest. I thought nobody was home for the longest time. The previous night, one other bird seemed to roost in the old Valley Oak hole, but I saw no sign of anyone else.

25 Jan Start watch 1135. ♀524 ^{DGrn - BPrk(w)/w} Metal / shows up, starts sapsucking from Scraggly blue oak at the edge of the field, due east of the enclosure and 30-40 meters uphill from the Valley Oak nest-roost hole, ♀602 ^{Blk/white} also sapsucks. 1220 ♀604 flies to the granary tree, and ♂86 jumps all over her, pecking her hard around the head & neck, for about 5 sec, until she moved off the storage limb. Is he trying to exclude her from the granary? 1340 end watch. No sign of ♂402 & ♀260. Especially worrisome about ♀260, since I saw her only poorly last time I watched, and today I confused Blk-wht/metal at ♀602 for ♀260's wtrm. Black is tough to see in poor light. Could she be gone? Whow, 1355, on the way down the hill I find ♀260 ^{white/DBlue} " / m. Not a great look, but good enough to exclude other possibilities. So where is ♂402?

6 March Start 0945. 1030, ♀260 wtr/m shows to chase ♀NB intruder. ♀604 Red-wht/Black, ♀602 Blk-wht/m also turn up. 1200. Complete census, even ♂402 ^{Yellow/DBlk} " / " who showed up late. ♂86 ^{mauve/mauve} LPrk / m, ♀523 ^{m/Red-DBlue} DBlue-wht/DBlue.

Hastings Reservation.

School Hill

- (6 March) and ♀524 ^{DGrn - BPhA(N) / white}
^{M /} Lots of sap sucking from
 that same Blue Oak on the E edge of the field
- 3 April
 → Start 1320. 1530, Down, ♀602 pecks hard at ♀604!
 good! 1600 complete census, ♂86, ♂402, ♀260, ♀523, ♀524
 ♀602, ♀604 all seen (in fact, all 7 birds in view at one
~~together~~ at one point). These guys are no threat to nest
 in the immediate future. ♂402 spent a long time
 camped out in the ~~nest~~ Sap tree, with ♀260 in the granary
 area. Lots of action in the sap tree (see foraging data,
 plus 3 CHawks early. Ecl
- 4 April ♀523 seen intruding at Low Hay (see LH notes)
- 23 April Nest check in the "newest" hole in the broken stub. 1000.
 5 eggs, I'm sorry to report. Too late I thought
 about getting these guys for a fake egg removal + perhaps
 photo. A bird flew out of the hole as I approached, so
 I suspect incubation underway.
- 24 April Up here at 1730, ♀504 ^{Red-wht / BIK} + I think ♀602 ^{Blk-white}
 in the middle enclosure tree. Walter saw ♀504 garrickling
 constantly at Low Hay. Confirm ♀602. Both seem to be
 bud-catkin eating + leaf-bark gleaning in the tree. ~~Wf-9-24~~
 Oddly, they are constantly giving soft karrits. Rather strange.
 Not being chased. Anyway, I would think that their
 chances of staying (allowed to stay?) at Low Hay are nil.
- 27 April Roosting, a ♂ in the hole when I arrived, stayed. I'm
 → pretty sure it was ♂402 (round head, short bill, double
 mustache right side) but I'll have to watch again there
 to make sure.

Acorn woodpecker

School HillHastings Reservation

Walter introduced
this egg, afternoon
of 25 April

29 April Nestcheck at 1130. 5 eggs still OK, plus the plaster egg introduced by Walter. Not thrown out in over 48 hours. I then introduce one of the dice

(16 mm³) (). Also measured eggs

① 26.0 x 20.3 did not hatch (or develop)

② 25.8 x 20.4 hatched (#) has nothing to do

③ 25.4 x 20.1 hatched with laying sequence

④ 26.7 x 20.1 hatched

⑤ 25.0 x 19.6 did not hatch (or develop)

30 April A strikeout at roosting. A bird came very late (1925) and I couldn't see anything.

1 May Nestcheck 1230. The die was still in. Not thrown out within 48 hours.

Roosting, a ♀ looking out as I arrive at 1900.

She leaves at 1920, But nobody else comes to hole (!) Strange. Could have been a second bird in, I suppose.

8 May Nestcheck 1340. 3 babies, 2 eggs (neither of which appeared to have developed. Did not band babies, will have to do that in a couple of days. Eggs #1 + #5 did not hatch. Young seemed fine + healthy. All 3 should fledge (I hope).

12 May Roosting, and confusion. I said hello when I arrived, nobody looked out. about 1920 either ♀260 or ♂402 flies to the hole, enters. Then a sure ♀ leaves, while ♂86 comes to the hole, then flies off with the ♀ to roost in the 80.2 nest hole.

Later, I get a shock by seeing a bird looking out. I don't think I missed anyone going in, so I'd say ♂402 roosted.

Melanerpes formicivorusSchool Hill

13 May Nestcheck 1700. 3 healthy babies:

① Yellow-Black 39.5 g

② Magic marker right wing & leg 40.0 g

③ unmarked 38.2 g

I dropped the band box into the poison oak after banding the 1st one, so the other 2 went unbanded.

Also, the hole face was on the verge of totally falling out of the nest, so I nailed it up in better shape.

19 May Roosting, and as is the norm for this group, nobody roosted in the nest.

23 May After Mary's report today of no feedings in 2 1/2 hrs, I check the nest at 1700. Of course, all 3 nestlings appear fine & healthy.

15 June Start 0730, Hopeless watch looking for juvenile. I see 1.
 later, sure (perhaps 668 ^{Bk-Grn/}), but not sure, and hear 1 or 2 others, but just too much foliage. Maybe I'll try below the granary another time. ♂86, ♂402, ♀260, ♀604 all seen. Also saw ♂402 peck hard at ♀604 in the top of the roost tree. Also, an unbanded family of Orioles (♀, 2 Basics), and a Banded ♀ Bluebird (DBlue M - LBlue, Scrub Jay style). End ~~NOVA~~ 0950
 → No sign of ♀523 or ♀602.

17 June Trying 0630 from blind below granary, near Malaise trap. Right off I spot ♀260 + ♀523 DBlue-wht/DBlue chase a ♀NB intruder out of the granary. Then J669 metal/.

22 June Start again 0⁶10. J668 + 669 seen, but once again no sign of 667. Wonder if he is gone. ♂86, ♂402, ♀523 + ♀604 also seen. No dominance.

Melanerpes formicivorusSchool Hill

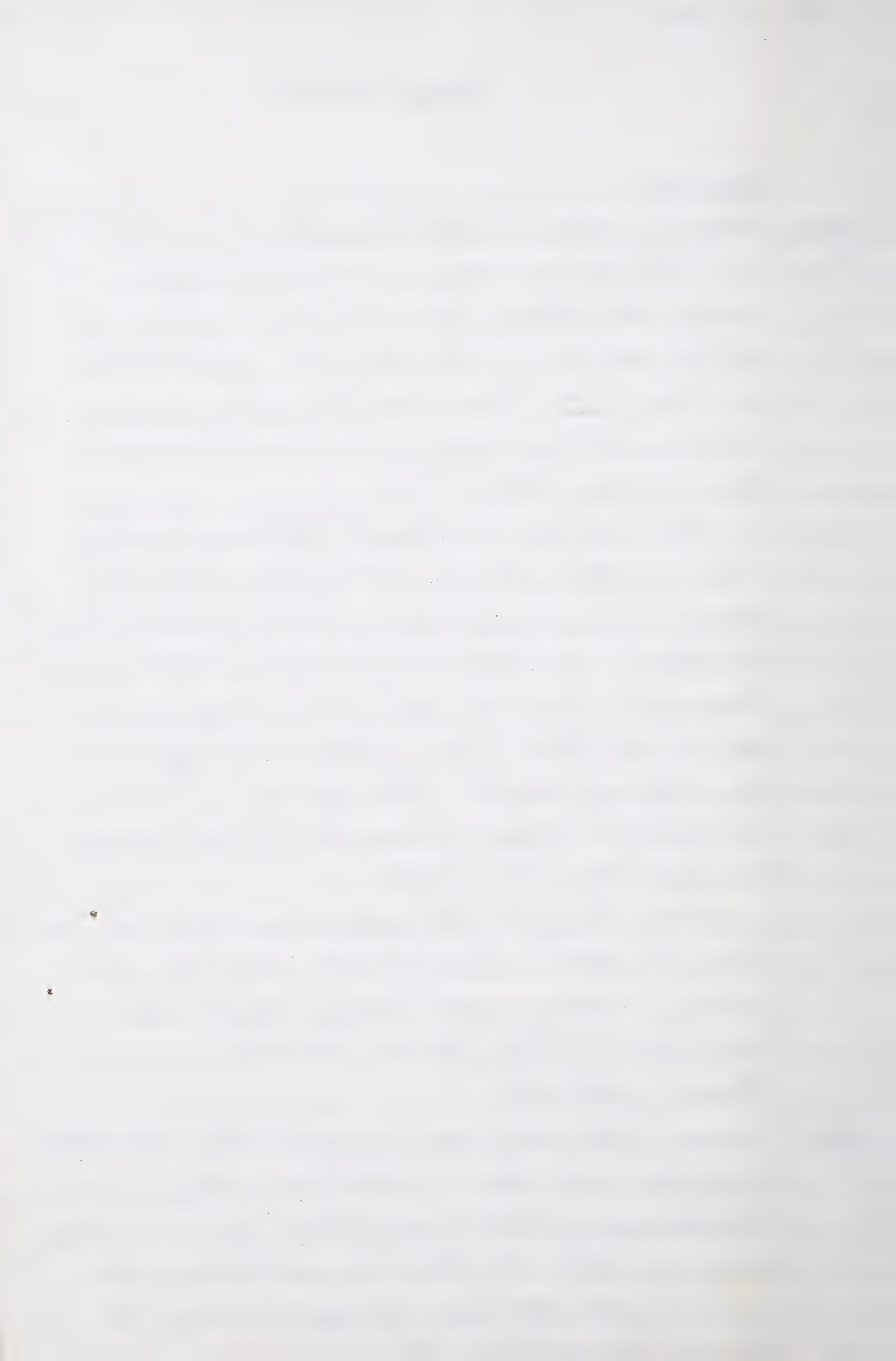
24 June ♀523 seen intruding at Gate + Westgate.

28 June Start 0555 from nr. Malaise. 0730, well, I may have actually seen something. J668 was in the hawk perch tree when he flew down to the Valley Oaks below the Malaise trap. I then think I saw J668 chase, peck, grapple, and otherwise jump all over another bird. Would only make sense if it was J669.

0800, unfortunately I just saw 2 birds on the flycatching perch, one really pecking hard at the other. I think both were juvs (one certainly was). The dom bird then flew to the granary. Then I believe the sub flew to pretty much the same spot. From there, I saw what I thought was the sub fly to an acorn limb, and putting my scope on, I find J668 as an adult ♂, ♂402 I believe. Oh well. All this was too confusing to be sure of, but it did not support the hypothesis that J668 > J669.

0820, Both J668 + J669 together on an acorn limb^{ac}, J668 being fed by ♂402. J669 did not try to horn in on the feeding + kept a respectful distance, suggesting again J668 > J669. I'll have to check the banding notes on these guys. End 0845

2 July At 0700, I find lots of skill birds at the Y: ♂402, ♀523, ♀604 and both juvs, J668 + J669. J668 I even find eating green developing Valley Oak acornlets (!) from the VO ^{on} the east side of the road near the Y culvert. Both Plaque juvs also here, being chased around a bit by the skill birds. J660 even in the same VO, chased out after a while by J668.



1981

R.L. Mumme

L

Melanerpes formicivorusSchool Hill

3 July Watching here 0545. No luck. Both Juvs, ♀260, ♂402, ♂86 all seen, but no dominance. End 0730.

9 July Trying again from bottom of the hill, 0645. 0715. Damn it, more iffy dominance. ♂402 feeding both J668 + J669 in the granary. My view was lousy, but I think I saw J669 pecking J668. Shit! I wish I could see one clearly. 0800. Boring, leaving. No, right as I leave, I finally see it! J668 ^{Blk-green/m} ~~Blk-green/Black~~ is pecked most certainly by another J, which has to be 669. Finally! That goes against my initial impression, but now I'm confident that J669 >> J668

29 Aug Start 0815. 0915. Birds flying around a lot on the upper end of the ~~granary~~ field, but little action in the granary area. ♂86 ^{whr/DBlue} Lnk/m, ♀260 " / m, ♂402 Yellow/DBlk all seen quite well, and I'm pretty sure that I got a look at J668 ^{Blk-grn/m} Blk-grn/Blk as well, in either ♂ or still juv. plumage. At least 4 birds seen together at once in a VO toward the top of the field.

0955, Everybody shows up in a VO ~~at~~ in the eastern edge of the field, eating green acorns. J668 confirmed, plus J669 ^{Or-DBlue/whity} ~~kn~~ / Or-DBlue. Complete census, I reckon. End 1000. These guys definitely do not have a fall nest, and I see no ♀ following or anything to suggest that they soon will. Also, J669 looks like he is definitely in ♂ plumage, but I'll have to check later to be sure.

** 6 Oct Group update:

♀523 + ♀604 -- Moved to watched Group (Low Hay) 17 July ± 2 weeks. Both of these ♀♀ were with still birds at the Y on 2 July; First

School Hill

J669 > J668

|| (probably others)

Melanerpes formicivorusSchool Hill

* (6 Oct) Seen at Low Hay on 3 Aug.

7 Oct cont (2) J ♀ 668 + J ♂ 669 moved to Y about 20 Sept ± 1 week

Last seen at S Hill on 29 August. Action at Y did not begin until about 10 Sept, and J 668 + 669 ^{first} ~~not~~ noted 11 and 20

** September. Seen regularly at Y thereafter

21 Oct First watch here in a long time, 1550: ♂ 402 has been seen lurking around the Y with ♀ 668 + ♂ 669; 1630, 3 birds here, ♂ 86 L Pk / M, ♀ 260 wht / M, and ♂ 402 ^{Yellow / D Pk}. A real storing frenzy by ♂ 86 while

I was here; Acorns were gathered from trees at the edge of the field near the malaise trap site

23 Nov watching here, 0900-1000. ♂ 86, ♀ 260, + ♂ 402 all up here seen well. ♂ 402 was storing acorns here, even after I saw him storing at Y a few days ago as well (see Y notes). What's more, I do believe that ♀ 668, who was ~~up~~ here for at least an ~~hour~~ 1/2 hour, might have been storing acorns as well. She may be in the process of giving up on Y, though she continues to be active there. It will be interesting to see what ♀ 668 and ♂ 402 finally do.

8 Dec Counted stores, 1430: 920 total. Also, ♀ 260 ♂ 402, and ♂ 669 (!) seen here as well. Don't know where / what her ♂ 402, and ♀ 668 will wind up.

Melanerpes formicivorusSchool Hill West

24 April Walk up here 1700. ♀531 ^{Brn-Or / Brn-Or} in the granary, another bird waking nearby. Nobody in holes

7 May Up here 1030. Nobody in last year's nest hole when I arrive, but after lying down + resting for 20 minutes, I roll over, say hello, and a ♀ looks out. These guys do have a nest.

28 May Up here at 1400, I nervously climb up to the nest hole using the rope ladder, open up the hole and find just one nestling, about 19-20 days old. 'Probably won't have to be banded about 3 June or so.

6 June Start watch 0740. Watching nest, wanting to see who's in the group. ^{Brn-Or / Brn-Or} 0900 well ♀531 " / m and ♂530 ^{Brn-Or / m} " / Brn-Or are both still here. Both seen in the granary (acorns still present). However, there is a possibility that the nest has failed. Never saw anybody at the nest feeding the nestling. Nor did either adult carry any food around in its bill. It's mm. Should check up here pretty soon (2 days), to see if a baby is looking out. Anyway, I'm pretty sure that this group ~~has~~ has been reduced to the basic pair.

8 Nov ~~more~~ About time I watched here, 0845. A bird flew into the granary while I was setting up the hide, so there is activity anyway. 1130, Not a rip-roaring success.

♂530 ^{Brn-Or / m} " / Brn-Or seen very well, and a ♀, but I never did see her bands. Will have to try again.

My definite impression is that only 2 birds are present. A good census, ♂530, ♀531 definitely here, Nobody else seems to be present. 0845 - 1015.

21 Nov

Melanerpes formicivorusWarp 5

30 April Walked up to the Black Oak holes at 1400. Nobody answered when I said "hello".

5 May Went up to the lower Black Oak hole at 1500 after Walter saw a bird looking out yesterday. I, too, find a bird looking out. After considerable difficulty in positioning string + rope ladder just right, I'm able to peep in. I see 3 eggs, but it looked like there might be a ledge partially hiding my view. will have to open it up tomorrow.

6 May Opened the Black Oak hole. Indeed 3 eggs, somewhat fresh (maybe 3-4 days of incubation). A bird looking out as I got there at 1130.

23 May Nestcheck by Walter here at 1430. Still 3 eggs, nest apparently abandoned. Should have hatched by now. I check the granary, and a few acorns (~100) are still there.

5 June I say hello to the hole here (on a very hot afternoon, 1230) nobody looks out. So they haven't (apparently) re-nested in the same Black Oak Hole, or they have a nest elsewhere.

12 June They have a nest elsewhere! Trying to watch Rd 1 from PO Hill, I am distracted by Warp 5 birds flying to the same spot on a Valley Oak just below the granary. Sure enough, I walk over and find a well-concealed nest hole. Easy to get to with a rope ladder. Probably climbable, if not for Poison Oak. The VO nesttree is 20 m East of the granary. Hole on NW side of tree, about 5 meters up. 0840, trying to watch hole for a while. 0910, Nothing yet, may be too close, not well enough hidden.

Back at 1030 with Walter. Opened hole, 3 babies, about 18 days. The first nest must have been abandoned soon after opening.

Melanerpes formicivorusWarp 5

21 June Set up blind, watching nest at 0715, 0915. An interesting watch. Only 2 birds come regularly. ^{M/wht-LBlue} ♀ 629 Or-LBlue/wht-LBlue and ~~♂ 528~~ ^{DBLue-PPnk/DBLue-DBnk} ♂ 528 M / " " From the ARF 2 list. Also present + coming to the nest once is ^{Lorn/M} ♂ 636 Lorn/DBrn-Lorn, also of the ARF 2 list. No evidence of other birds. See nest watch on reverse. Don't know what to make of these ♂♂ here. Probably truly originated from ARF 2 + moved here this year, but we may never know. Another problem is that on 12 June I thought I saw ♂ 630 here, but no sign of him today. Perhaps I saw just Metal LL, and assumed that it was ♂ 630, who really ♂ 528. End 0930.

7 July Wander up here 0740. In the granary as I arrive and surprisingly not flushed is J704 ^{LPink-DBrn/Metal} LPnk / Black. Also, I think that I've found their sap tree. A live oak (of course), 25 meters south (up the hill and slightly toward the ravine) of the granary. Map on back. I flushed 3 birds out of this tree when I walked up, and it has numerous sap holes. Finally, these guys are very close to being out of acorns. I could count only five or so. 0820, Yes, J704 sapsucking in the tree I described. 0900, ♂ 577 ^{BPrk-BK/BPrk-Black} BPrk-BK/M shows up in the granary, extracts and eats a live oak acorn. Not chased, but flew off nervously after about 10 min.

19 Sept Having briefly seen birds at Pipeline 17 Sept, I watch at Pipeline 0800, but am distracted by Warp 5 birds instead. Pretty sure that I saw J702 or-Perp/M and J704 LPnk/BK up on the hillside. 4 birds together at once

Warp 5 21 June 1981

0715 start

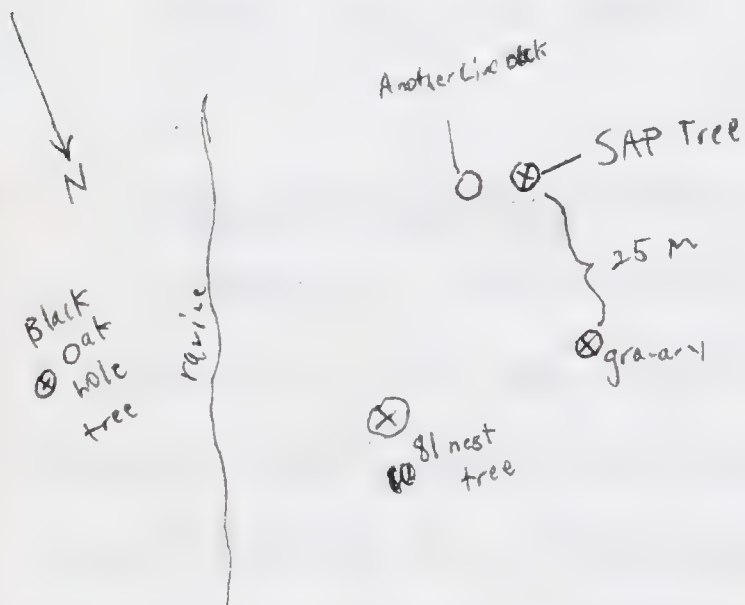
0725

130 min

45 ♀629 (2) I
46 ♂528 (2) I
48 ♂528 ⊖
49 ♀629 (2) I
49 ♂528 (2) I
53 ♂528 (3) I
0815 ♂528 ⊖
15 ♀629 ⊖
38 ♀629 ⊖
39 ♂528 ⊖
40 ♀629 ⊖
43 ♂528 ⊖
44 ♀629 (2) A
0906 ♀629
19 ♂528 (2) I
24 ♂636 (2) I
25 ♀629 ⊖
end

Warp 5 7 July 1981

Live Oak Sap tree



Mela-e-pes formicivorusWarp 5

20 Oct I stumble up here 1330, and find ♂636 looking like he^(L Grn / M) is frozen to the granary. Hasn't moved a muscle by 1345, even with me setting up the hide 30 meters away. Lots of acorns stored already, both in the 1^o granary and the nest tree. 1355, ♂528 ^{DBlue-OPnk / DBlue-OPnk} shows up briefly as well.

1500, Boring, no trace of any other activity. Will have to try some other time.

23 Oct Much better watch here, ^{0930.} ~~0730~~ 0730 - ~~1015~~. Complete census. Two ♂♂ above, ♀629 ^{Or-P / Orange} and all 3 juvs. 702 ^{Or-P / M}, 703 ^{Yellow / Mauve} M / Mauve, and 704 ^{L Pnk-DBlue / M} L Pnk / Black. all 3 apparently just molting into ♀ plumage! ♀703 & 704 certainly were in ♀ plumage, and J702 was marginal, but I think I saw enough black head feathers to convince me. Only other interesting item is that in the VO granary, I saw ♂528 violently peck at both ♀704 and J702 (separate occasions), as if he was trying to exclude them from the granary. Once ♀703 was on the branch with ♂528, and ♂528 made a move (it seemed) to give 703 the same treatment, but nothing happened.

Melanerpes formicivorusARF, too20 May

Up here looking for these guys nest, 1530 - 1800. Believe it or not, success! After checking the usual holes, I sat down in the field and tried to watch where the birds were going. 3 times I saw birds (including a banded ♂ with an acorn bit) fly off in the general direction of ARF) and once I saw a ^{NB} ♀ (with a mouthful of insects) fly off across West Ravine. I stomped around the very overgrown ARF-ARF 2 area for about 1 hr, not finding anything except a not unreasonable looking hole in a Blue Oak 40 meters S of the road near the ARF 2 "trail head". Looking across the canyon was much easier. After standing along the road for about 5 min, I saw a woodpecker fly straight to the nest! Nest is in a NE facing hole in a Valley Oak near the very top of the ridge opposite W ravine. I would suspect that they have fairly young nestlings. Interestingly, I saw a bird fly in and enter the hole at 1815, but despite my yelling "hello!" right underneath the nest, it would not stick its head out! Maybe that's why we can never find the nest here.

Anyway, there is still at least 1 unbanded ♀ here.

21 May

Open up the nest hole at 1330. 2 nestlings, about 8 days old or so, plus a 3rd very small baby (<5g) dead or near death. All 3 returned to the nest.

24 May

Watching nest ~~at~~ 1530, 1545, a ♂ NB shows up at nest with insects. I was stirring around when he came, and after sitting outside the hole for 10 min, he flies off without entering. 1700, Well well, a ♀ NB here as

Melanerpes formicivorusARF, too

(24 May) well (I think she even removed a fecal sac), and
 ♂ 635 ^{Mauve/Red}, listed on Warp 5, feeds &
 broods young here. ♂ 635 was one of the 2 ♂♂
 ambushed at Warp 5 in December, ambushed at ARF 2
 in January. So now it looks like we can consider
 him an ARF 2 bird that was roosting at Warp 5,
 rather than vice versa. 1730, 2 more visits by ♀ NB,
 (one with a (FS) removal) and one by ♂ NB. End 1730. Will
 have to watch here some more.

30 May Start watching nest 0920. Same 3 birds seen here as
 before, 1 ♂ NB, 1 ♀ NB and ♂ 635 ^{Mauve/Red} ^{Metal/Red}.
 Perhaps that's all there is? Nest watch details on back.

6 June Banded 2 babies here, 1700. (See capture records
 for 687, 688).

Hole angle -30° , direction 65°

13 June Nest watch here, babies looking out (or at least 1 baby).
 1140 - 1300 ♂ 635 at first was the only bird coming, leading
 me to wonder (a) if the NB ♂ & ♀ have a second nest elsewhere, or
 (b) One nestling has already fledged, and the NB birds are otherwise
 occupied with them. Will be worth checking other holes
 before too long. The ♂ NB did feed a great deal later in
 the watch.

24 June Tried to watch roosting here from the edge of the field. Heard
 a few harriks along Ann Road, but nothing else. I checked holes
 later, and I don't think anybody roosted in the ridge hole, the granary
 valley oak hole, or the Blue oak hole or the Bee hole.
 Watched roosting at the nest 21 June, nothing there either.

30 May 1981

ARF 2 nest watch 0920 - 1050 90 minutes

0920 start

41 ♀ NB (3) I looks out

56 leaves

1005 ♀ NB ⊖ looks out

10 ♂ NB ⊖ ♀ leaves, ♂ l.o.

16 leaves

17 ♂ ? ⊖ (not NB, probably, 635 by feed

23 ♂ 635 (2) I

27 ♂ 635 (2) I

♀ NB ⊖

♂ NB (2) I

31 ♂ 635 (2) I l.o.

35 leaves

36 ♂ NB (2)

44 ♀ NB ⊖ looks out

50 end

13 June

1140 start, baby looking out

52 ♂ 635 (2) I

56 " " "

1211 " " "

33 " " "

38 ♂ NB ⊖

39 " " "

40 " " "

41 " " "

42 ♂ NB (2) A

1300 end

Melanerpes formicivorusARF too

2 Dec I don't know what's going on here. There have been very few acorns stored here all fall. At 1030, I counted stores and found 30 in the 2^o granary, 175 in the 1^o g, = Total 205! Not exactly an amount that inspires confidence. Will have to keep tabs on these guys. It does seem like there were few (if any) acorn-bearing trees in the area.

Melanerpes formicivorusARF

- 20 May Wandered around here 1430-1530. No birds looking out of the 1980 hole. In fact, no trace that any birds were even around, actually. I did find 2 fairly new looking W-facing holes in a high dead stub in a valley oak just 20 meters SW of the ARF granary. Also a Coopers Hawk nest (incubating ♀ + 3 eggs) 30 meters NW of the granary.
- 22 Oct Here at 0745, ARF is occupied! Already several hundred acorns stored here. Will have to watch to see if anyone here is banded.
- 22 Nov Trying to do just that, 1215. I can see about 300 acorns or so just from where I'm sitting. 1345. It poor day to watch. A few karrits, but nobody has come to the granary. A few weeks ago, I remember seeing 3 birds in the granary here at one time. So there should be at least 3 birds in the group. I'll have to try again.
- 2 Dec Making another try here, 0845. 0950, well, it looks like 3 unbanded birds (Drat!), 2 ♀♀ (I'm pretty sure) and 1 ♂. Had a brief impression there might be a 4th bird around, but there was a lot of intruder activity here, so I couldn't be sure. Anyway, I'll definitely have to look into the possibility of an ambush here. end. 0955

1981

R.C. Mumme

2

Melanerpes formicivorusBlack OakHastings Reservation6 Feb

Start watch 1010. ♂ 102 white/yellow, plus another ♂ 426 Blk/or (?) in the tree tops between Black Oak + Arnold 1.

1200, over at Bianca knoll, in the Valley Oak closest to LA2 I see ♂ 321 ^{Orange / DBLue-Yellow (N)} ♂ 497

Metal/Blk-Red,

and perhaps ♀ 544, but not sure.

1340. Confusion. I'm now on the E. end of the knoll, looking NE across the ravine toward a large VO. Two NB ♂♂

there, and I even saw a dominance interaction (over a Black Oak acorn) Earlier I saw a ♀ NB on the knoll that flew across

§ Ravine to south fence Bianca looks pretty much like a

free for all: 1345, Presto, at the same spot, ♂ 426 ^{Blk/or-white}

and ♂ 321 ^{Orange}, plus a ♀ turn up. Geez, this is tough

to figure out. 1420 More interesting stuff. I close in on

this large VO on the Bianca - Black Oak Ridge. When some

hawk ^(?) flies in. A Flicker breaks, but I see 2 wickers

freeze. Then one wicker flies out, and 3 more break

simultaneously. I pick up ♂ 426 Blk/or, ♀ 427 Red/M,

and ♂ 321. Then a ~~Red~~ 5th woodpecker drifts out,

lands in the same tree as ♂ 426, who proceeds to chase

the latecomer. Perhaps an unbanded ♂ that I saw

here earlier?

1445. Back watching the knoll, ♂ 321 and a ♀ NB, no

aggression. Then a NB ♂ chasing 2 ♂♂, both ^{M/}

Perhaps one is ♂ 611, LA2?

looked like 1st year, very definitely

1500, saw a male, Metal / (Red, orange) - Black?

Perhaps ♂ 566, A1? It was chased mildly by ♂ nobands

At least 2 NB ♀ here, they may be friendly.

Melanerpes formicivorusBlack Oak (Bianca)

(6 Feb)

1520, 2 NB ♀, 1 NB ♂ together in the Bianca Knoll area.

All obviously quite friendly. The ♂ explore the old Bianca granary a bit.

1610, Start watch at BO granary ♂546

LGreen / DBLue

LBlue-Red / LBlue-Red

and ♂624 in ♂ plumage (!) show up in the 2^o granary area, along with other birds

7 Feb

I try to watch here, without much success. I do get a good look at ♂545

LBlue / metal

♂624

LBlue-Red / LBlue-Red

and another fleeting glimpse at something that might have been ♀544 (light/dark-light), but not positive. Watch cut short at 1530 by the startling discovery of a new group, sun of Black Oak!

7 April

Walking by 1400. As usual lots of weirdness at Bianca

♀NB

♂545

LBlue / M

♂

624

LBlue-Red / etc

etc / etc

on

the BD side of Bianca ravine. Lots of activity drumming wakis, on the Bianca Knoll. 1430, ♂497

metal / Blk

and a bunch of other fly back to Black Oak. Still some birds on the Knoll, probably unbanded. 1440, 2 ♂NB, a ♀NB waiting together in the bianca area. Maybe somebody really is trying to move in here. All 3 together on a branch, ♀NB open-wing waka, with crouch + tailraise, one ♂NB pecked at the other.

1450. I walk over to the main granary area, and I flash 4 birds that fly as a very tight pack of 4 East. Neat! Could the 4 be the breeding ♀, ♂321, ♂102, ♂426? Definitely suggests that eggs are on the way, soon!

27 April

Well maybe not so soon after all. After finding nothing

Melanerpes formicivorusBlack Oak

(27 April) in the usual Black Oak Holes, I pick up "the pack" in between Lower Bianca, Black Oak + Sobo. I didn't see any buds or sexes, but 4 birds flew off as if tied together with 6-foot lengths of monofilament line. Incredible! Definitely indicates that they haven't nested yet. Why is the ♂ following so fanatical in this group, and for such a long period (they've been at it at least 3 weeks now).

1640, Picked up "the pack" again in the woods near the old corral confirmed ♂102 wht/yellow, ♂426 Bk-orange. Also, a couple of unbanded birds here (♂♂, I believe) scrapping with some of the Black Oak helpers (I saw ♂546 Lbrn/DBlue). The NB were not chased out, 1645. Leaving. Looks like 3 birds here. What's going on.

22 June Walking by at noon, I hear birds tapping from inside the old 1979 nest hole. I say "hello" and two birds fly out. Hmmm! Could they already have eggs, or are they refurbishing? Will have to check soon.

18 July Walking by the 79 hole, I hear the babies inside, so nest is still in progress.

** 6 Oct PURGE: J625 not seen after banding, 20 July 1980
(Long overdue purge)

22 Oct Watching granary from hide, 0800. Shitloads of acorns here already. The granary looks full. 1030 End. Good census!
Birds seen were ♂426, ♀427 DBlue/Red, ♂102 Red-2cm/m, ♀320 Red-Lbrn/m, ♂321 LBlue/m, ♂497 LBlue/or, ♂545 (not seen since Feb), ♂546 Lbrn/DBlue, ♀689 (in ♂ plumage), ♀691 (in ♂ plumage)

22 Oct Black Oak storage data

Acorns stored 0800-0930, in main granary only.

♂546	
321	<del> </del>
691	
497	
689	
713	

Melanerpes formicivorusBlack Oak

(22 Oct) and J713. Everybody seen quite well. J713 may be coming into ♂ plumage, but it could still be too early for him. Only birds missing were ♂624 and J690. A lot of storing activity, some in the already-crammed main granary, and a lot in the 2° area.

10 Nov Lots of BO birds around keep Out + Lambert (see Lambert notes)

3 Dec " " " " " Lambert (see Lambert notes)

also, ♂321 or / DBI-Yel (IV) ♂689 M / or or / wht in the

Black Oak - Bianca tension zone.

11 Dec A swing by, I see ♂102 ^{Yellow / wht} and a ♀ NB, which I hope does not belong here.

14 Dec Counted stores, 1600:

Fallen Limb 1800

Main area 1000

2° area 500

TOTAL 3300

Not bad.

Also, a limb in the 2° area had fallen, so the group lost ~ 150 storage holes and about 100 acorns.

Melanerpes formicivorusSon-of-Black-Oak (SOBO)Hastings Reservation7 Feb

At 1530, I casually stroll down the grassy slope east of Black Oak and, lo + behold, stumble upon a brand, new Acorn woodpecker group! Here are the facts.

① A sleazy looking, ^{partially dead} Valley Oak at the base of Black Oak Field (just before the extremely steep part) has a pretty good number of Acorns, mostly Q. chrysolepis. Not surprising, in that Golden Oak predominates in the steep terrain below the granary, and their acorns littered the ground while I walked around.

② I sit down + try to watch, and 4 birds show up. At least 3 (I think) were unbanded, and one of the 3 was ♀.

③ This might explain my observation of 2 unbanded ♂♂ yesterday in this area (see Black Oak notes)

④ Did these birds just colonize this granary this past fall in association with the big ~~acorn~~ chrysolepis crop, or was it the year before? I remember strolling by here in the summer of 1979 and finding no activity. Still, it ^{is} possible that this territory was occupied Fall 1979 or Spring 1980. However, I would suspect Fall 1980 is more likely

⑤ One of the 4 birds that was here seemed to have a "1st year birds karrit."

⑥ I can count ~300 acorns while sitting above the granary. That does not include the backside. Backside make ~600 total

12 Feb

After moving here down from Black Oak, I try here again at 1500 hrs, a bird flushed from the granary as I walked up.

1630. Nothing in 2nd granary. Karrits to the S, but that's all folks. Roosting, I find one bird to of the granary low hole,

Melanerpes formicivorusSobo

7 April A quick pass here 1500, ♀847 NB the only one in the granary. That is all. Nobody in either hole.

27 April Start watching here 1515. ♂638^{metal / DPrk} and ♀640^{Dgreen / Dgreen}
 Dbrn / metal (didn't see narrowness) in the granary momentarily. That ♀ flew off, but ♂638 did not follow. She (plus another bird?) flew off toward the northwest. Later ♂638 took off SE. 1530, ♀847 NB comes by quickly, also flies NW. These guys still have a well-stocked granary.

14 May I say hello to the granary holes at 1230, but nobody looks out. I also wander all around the Bianca-Black Oak ridge near the granary, but find no reasonable looking holes.

17 May A walk by at 1130. Nobody in the holes in the granary

21 May An incredible struggle, but I finally find the nest here today, tipped off by the birds flying to it. It's a N-facing hole in the main trunk of a Black Oak just N of the "flat", at 45 meters west of the Bell fence line. Easy climb

22 May Open up the hole here 1400. 3 well-feathered, eyes-open nestlings (maybe 20-22 days?). Will have to band these guys soon!

24 May 3 young banded

26 May watching nest ~~1644~~ 1640 End 1810. All 4 birds, ♂638^{LBlue / DPrk} (at nest only once), ♂639^{yellow / DBlue}, ♀640^{Dbrn-Red (IV) / M}, and ♀NB here. ♂639 is definitely the stud ♂. He fed many times and removed all the fecal sacs. Could detect no difference in behavior of ♀♀, but I suspect ♀640 is the breeder. ^{♀NB is helper.}

SOBO nest watch

26 May 1981

1640 - 1810

90 minutes

1642 ♂[?] ② A

48 ♀640 ⊖

50 ♀NB at hole, flies off.

51 ♂639 ⊖

52 ♂639 ②

53 ♂639 ⊖

56 ♂639 ⊖

1702 ♀NB ③ I

15 ♀NB ② I

15 ♂638 ⊖

20 ♀640 ③ I

24 ♀640 ② I

24 ♀NB ③ I

25 ♂[?] (FS)

29 ♂639 ⊖ (FS)

37 ♂639 ② (FS)

37 ♀NB ② I

38 ♀NB ② A

46 ♂639 ⊖ (FS)

48 ♂639 ⊖ (FS)

59 ♀640 ⊖

18 02 ♀640 ⊖

05 ♂639 ③ (FS)

09 ♂639 ② A (FS)

	♂638	♂639	♀640	♀NB
n visits	1	10	5	5
fecal sacs	0	8	0	0

Melanerpes formicivorusSobo

7 June watching at granary 1130 for signs of either juvenile dominance or a possible 2nd nest. Idling the time by, I count about 400 acorns in the northern branch of the granary visible to me. These guys are definitely doing well.

1300. Complete census. ♂638, ♂639, ♀640 and ♀NB all seen quite well in the granary. No juveniles seen, so I guess they are still a bit young. No evidence of ♂♂ associating with particular ♀♀, so I guess that's some circumstantial evidence suggesting that a re-nest is not in the immediate offing.

1330. Checked the nesthole: Empty. All 3 babies fledged ~~then~~ (I would guess) and no new nest.

22 June Climbed up to and stuck my head over the nest hole at 1100. Nothing, so I would guess no babies + probably no eggs since no adult in the hole. It might be worth watching here in a week, just to make sure they don't have another hole (I said hello to the granary holes, no response)

18 July Watching from behind trees near the granary. 1010. 1120. Not much action here at all, save for J658 M/LBlue-Bk/LBlue-LBlue-BK/LBlue flycatching from the granary abit. A couple of adults came by but no good looks. Still plenty of acorns in storage here.

12 Sept Tried to watch roosting. See H1 notes. No idea where anybody

14 Oct Watching here 1615. These birds have not wasted any time. The granary is already loaded with acorns. Looks like mostly live oak, some Valley. Might be a few "leftovers" from last year, but not sure. I count 506 just from where I'm sitting. 1715, Nobody shows.

Melanerpes formicivorusSobo22 Oct

Another ~~try~~ try here, 1050. 1250 a little better I see
 both J658 ^{M / LBlue-BK} J659 ^{WHT / BK-OR}, both in ♀
plumage! ♀640 ^{Dbrn / DGrn-Red (N)} also seen, but
 unfortunately, nobody else. I'll have to watch here yet
 again.

11 Dec

Not one to be easily discouraged, watching 0850. Doing very
 well here, acorn-wise. 0950, 'Quitting!' One bird flew up,
 saw me, then left. I may just give up here until
 next spring.

Melanerpes formicivorusArnold I

5 Aug ♀567, wanderer supreme, at Rd 1 today. I recall seeing her (or probably her) this spring at Rd 3 as well. See Rd 1 & Rd 3 notes.

30 Aug A quick look here, at the trees on the fence-line 30m N of the Lambert fence-line. I find ♀568 ^{Wht-mauve/m} and J680 ^{Yellow/LBlue-Red}. The former I saw fly off toward Lambert, the latter ate a green VO acorn. J680 looks possibly like molting into ♀ plumage, but that's extremely iffy.

12 Sept Tried to watch roosting here with Janet: Nobody roosted in either the two granary holes or the nest hole. (transfer to 5060)

13 Sept Janet watched the group here, 0800-1000, and saw ♀505, the long-lost ♂566 (!) (not seen since 6 May), and J680, who Janet thought might be molting to ♀ plumage, but she wasn't sure.

14 Oct Watching from hide above granary, 0830-1030. Granary census on back. Storing has begun! Earlier at Lambert, I saw J680 ^{Yellow/LBlue-Red}, and as suspected, she is indeed in ♀ plumage. 1020, Very boring. Hardly anybody came to the granary, nobody stored any acorns, and nobody defended the granary against a lot of inter-specific intruders. I did manage a fair census, mostly by seeing birds in the tree next to the hide. ♀680, J679 ^{BLK-LBlue / LBlue-BLK}, ♂566 ^{M/or-BLK}, ♀568 ^{Wht-mauve/m}, ♀505 ^{Wht/LPnk}, and a very fleeting glimpse of a bird that must have been ♂100 ^{Yellow-DBree- / Yellow-DBreen}. Only ♀567 not seen, but it wasn't a good census, so she may indeed be around.

14 Oct 1981 Arnold 1 granary census

non-defense

0830	nobody	0935	nobody
35	"	40	"
40	7568	45	"
45	nobody	50	"
50	"	55	♂ 566
55	"	1000	nobody
0900	"	05	"
05	"	10	"
10	"	15	"
15	"	20	"
20	"	25	"
25	"	30	"
30	"		

0840	Titmouse (g)	0
0845	Blackbirds (roosthole)	0
0855	Juncos (g)	0
0955	Nuthatch (g)	0

no storage

Melanerpes formicivorusArnold I

(14 Oct) Later, I find many AI birds in the "center field" Valley Oak, including ♀567 M/Red, and a good look at ♂100 Yellow-Dbrn / Yellow-Dbrn. ♀567 later seen.

Lots of acorns stored here already.

11 Dec Counted stores. A guess, really, because the counter was fucking up. Anyway...

TOTAL 3300 or so. Doing pretty well. /

Also I saw ♂566 M/or-Black ♀568 wht-mallard/m
and ♀680 Blk/or-BLK Yellow/LBlue-Red in the vicinity of Big Tree. It even appeared that these birds were storing acorns in a broken Valley Oak near the down Big Tree granary. (I found 1 stored acorn). Also, I was fairly sure (not positive) that I saw ♂566 fly up near Keep Out, then fly down to the AI granary. Perhaps KO is just an extension of AI, and not a group unto itself. That might explain the rather low attendance at Keep Out.

Melanerpes formicivorusKeep Out10 Nov

To my considerable astonishment, I take a peek on the west side of the granary here and find about 30 stored acorns! See Lambert notes for additional confusing details. So far, I have not seen any birds working the granary or otherwise appearing as if they belonged there.

3 Dec

1045, Lots of acorns here! Somebody is here. 1200 watching, the situation is confusing. Only ♀568 ^{wht-mauve/M} ^{Mauve-wht/wht-mauve} (for sure) and ♀680 ^{Yellow/LBlue-Red} (I think) have been in the granary. (Both from AI). Both looked like they were ^{eating} ~~storing~~, not storing. Also, their sib ♂566 ^{Blk/or-Blk} ^{wht/Blk-or} has been around. For good measure, ♀659 M / " " of SOBO was flycatching 100 m W of the granary. When she approached to within 30 m, she was chased by ♂566. So is it all AI birds? Also, ♀652 ^{Yellow/M} was flycatching 100 m W of the Keep Out granary, but I suspect that she's at Lambert.

1330, Flycatching 35 m SW of KO are ♂566 and ♀680, again. I guess these 2 different-sex sibs are here.

Quite a bit more watching needed. 1400, another SOBO bird, ♀658 ^{M/LBlue-Blk} ^{LBlue-Blk/LBlue}, and a ♀NB, too. Did not appear that the ♀NB was "with" the SOBO ♀♀, but it was hard to tell.

11 Dec

Counted stores: 150 total. Still lots of room. See AI notes for thoughts on this "group"

1981

R.L. Mumme

1

Melanerpes formicivorusLambertHastings Reservation7 Feb

Start watch 1130. These guys have remarkably few acorns remaining. 1245. Not a sign of anyone.

30 Aug

Boy, lots of detailed notes for these guys. Starting watch 0805. 0915. Another big zero. Actually, there were birds here, a couple of banded juvs (suspect A1 or FH) a ♀ adult, and a ♂ NB, then a juv NB, but nobody acted like they belonged here. Later at A1 I saw A1 birds commuting back & forth to Lambert.

14 Oct

Watching 0725. No acorns stored here yet: Maybe this territory is abandoned. Surprising, since the acorn censusing here revealed a shit load of acorns here. 0730, I spoke too soon. A POWER STRUGGLE!! First bird I find is ♂ 583 ^{BPk / Mauve} " / metal, so the Lambert lineage is still intact. A lot of ♀♀ around, with a fair amount of chasing, but by 0800, still no garricks. It looks like a coalition of 3 ♀ NB have the inside track here. One of the three is a very dark-eyed juvenile that seems to have just molted into ♀ plumage. Also seen was a ♂ NB, J ♀ 680 ^{Yellow / LBlue-Red} from A1 (just confirmed ♀ plumage), and perhaps ♀ 568 ^{Mauve-vht / "} from A1 as well, but I lacked confirmation. In total, participants are: ♂ 583 5 ♀ NB 1 ♂ NB 2 ♀ banded = 9 (2 ♂♂ 7 ♀♀). This has probably been going on for some time now, and I'm catching the tail end.

0805, things very quiet now. I'd say it might be about over, but when I first arrived, I thought I saw ♂ 583 supplant 1 or 2 of the cooperating ♀ NB's. All 3 may not stay (rather, only some might). End 0820

Melanerpes formicivorusLambert(14 Oct)

Further note: Over at U A2 is none other than ♀ 632 ^{Red-whit/Red-whit} metal / " , the ♀ that Walter banded here in October, 1980. Thus, she did not disappear in March, but rather abandoned (lack of acorns?), went somewhere for the spring and summer, then showed up here. The creep.

2 Nov

Trying here again 0900. Some sign of life: A very few acorns are stored in the "holey" Valley Oak, none that I can see in the fallen limb.

1015. Still a mess here. A ♀ IUB and a ♂ NB here briefly. I give up. I will NOT watch here until a lot of acorns are stored. There's a live oak next to the granary just loaded with acorns, so perhaps the "residents" (if there are any) are going to wait until the last minute.

10 Nov

A walk up here, nothing has changed: At most, 20 acorns are stored in the fence-line granary. No acorns are stored in either the broken top tree or the fallen limb. The Valley Oak acorn fall is nearly complete, too. And the acorn laden Live Oak 10 M S of the fence-line tree, its acorns are starting to redden + mature. They should certainly begin falling, soon. Is Lambert abandoned? Bad news for habitat saturation, if it is!

1430, Hold on! Down around the area between keep out + Lambert I find ♀ 652 (formerly of Far Trn) ^{Yellow/LGreen} and all kinds of Black Oak ♂♂: ♂ 545 ^{Blue/M}, ♂ 689 ^{M/or}, ♂ 624 ^{Blue-Rod / Blue-Rod}, and ♂ 691 ^{" " / " "}

Melanerpes formicivorusLambert

(10 Nov) DBlue-Yellow(N)/Lgreen. After watching these 5 birds (maybe more), they flew directly up to the Lambert granary area, I walk up there, but in the process I flush 3 birds off to the NW. All the ♂♂ looked reasonably cozy with ♀652. What is going on? Are some or all of these birds going to move here. ♀652 is no surprise, as I expected to see her again after her abandonment of Fanny Arnold. What's more (just for additional confusion [as if I needed any]), there are acorns stored at Keep Out. Geez Louise! (see keep out notes)

3 Dec 1030: Hallelujah! Acorns + Birds! First bird I find is ♂691 DBlue-yellow(N)/Lgreen of Black Oak. I will have to guess he's here with some bro's, and ♀652.
1330. Not much luck watching, but I do manage to confirm ♀652 Yellow/Lgreen
" / M, and (the only other BO ♂ I saw) ♂624 ~~Yellow/Lgreen~~
LBlue-Red / LBlue-Red.

1405, well over toward Lambert from Keep Out, I find ♂545 ^{LBlue/M} Or-LBlue/Or, so it would seem that the activity I saw 10 Nov was for real.

11 Dec A quick look, 1030, ♂545 ^{LBlue/M}, ♀652 ^{Yellow/Lgreen} " / M.

Counted stores:

Holey tree + environs: 365

fallen limb 1475

Valley Oak (broken) 425

TOTAL 2265

Not bad

for one month's work. While counting, ♂624 ^{LBlue-Red / LBlue-Red} shows up briefly.

1981

R.L. Mumme

Melanerpes formicivorusUpper Arnold 217 July

Watching here 0840. These guys still have tons of acorns.

Lots of activity in a thin, spindly Valley Oak near the top of the E-ridge of S Ravine. I see ♀621 wht/or/wht-or

for sure, and ~~make~~ good look at ♂681 or/yellow.♂123 ^{DBlue / LBlue-or} " / m sits for 20 min 30m below the

granary with food in bill (!). Could they have a second

nest? 0930, ♀591 ^{BPrk / Dbrn-BPrk(N)} supplants ♀567 ill Red/Red intruding

from A1. 1040. Bear here for an extra hour. At about

0945 I was at the UA2 nest tree when I thought for sure I heard the sound of begging baby.

13 Sept

Watching here 0800. These guys are still loaded with acorns.

0845, a few birds, ♀621 ^{wht-or/m} ♂123 ^{DBlue/m}

→ and ♂681 orange/yellow in ♂ Plumage (!). He may be the only juvenile left alive here. No action in any nest holes.

14 OctWatching 1120. Whoa, a new ♀ here, I read as ^{LGrn-wht / LGrn-wht} Metal / ^(LGrn-wht) ~~(LGrn-wht)~~

also ♀NB intruders, drumming, garricks. 1250, total confusion.

A ♀ Yellow/m? Definite ♀, definite yellow/m. Yes,

its ♀652 ^{Yellow/LGreen} Yellow/m from Fanny Arnold, the breeding

♀ there. I don't know what her story is over here (trying to step up in territory quality?) But I first thought she

and the mystery ♀, ^{LGrn-wht / LGrn-wht} m / 11, were cooperating,

but I later saw ♀652 definitely being chased by the

Grn-wht ♀ Also here are ♂123 ^{DBlue/m} and♂681 ^{yellow/m} But no trace of any of the other UA2birds. I did catch a glimpse of another bird who I read as ^{BPrk/or-BPrk}

Unless it was ♂622 of 1500 (unlikely, at best), ♂566 of A1

UA2 granary census 14 Oct 1981 1120-1320

UA 1120 nobody

1125

30

35

40

45

50

55

1200

Scrubbed, too much confusion

Melanerpes formicivorusUA2

(14 Oct) and I mis-read the band, I can't have any idea of who that was.

The Green-Wht ♀ is also a mystery. She looks recently banded, but does not show up on the field list. Could be a bird netted in the Lambert (or Low Hay?) revolution this year, or a bird banded on PO Hill. Shouldn't be too hard to figure out who this new ♀ is.

So, we must conclude that ♀621 has cashed her check. Last seen on 13 Sept, probably disappeared late Sept, early Oct. ♀682 + 683, not seen after banding, must certainly be gone.

Hey, I just realized that that ^{Blk-Or/Black} bird that I saw could be ♂590 ^{Drn-Lbrn/Blk}. Would like to see him again. I'll say I saw him. Seems likely.

Looks like storing has begun. These guys, of course, never even came close to running out of acorns, but I did see a few new greenies (Blue Oak?) in the granary, amidst all of 1980's stores.

**

footnote; Checking the records, I find that the new ♀ here is ♀632 ^{Red-wht/Red-wht} M / " " , the ♀ that Walter banded at Lambert in fall of 1980. Thus, ♀632 did not die, but rather abandoned Lambert (because of no acorns?) in March or April, went somewhere, then showed up here in Sept or Oct. (This also proves, once again, that I can't distinguish many colors. Oh, the trials of the color-blind. I even had many close looks at the bird, and all the time I thought it was Lbrn or (at worst) Or.

Melanerpes formicivorusU A 2

10 Nov Watching from hide, 1100. A good start; As I walk up I confirm ♂590 M/Dbrn-Lbrn, who was questionable last time I watched. 1230, bad finish. Absolutely nothing else; No wakas, no birds, a big zero.

3 Dec Trying again, 0900. I again see ♂590 M/Dgreen-Lgreen and ♂123 DBlue/Metal as I walk up. A third bird seen as well. After that, zilch! End 1030

11 Dec Counted stores, 1500.

"Secondary" tree

1100 (many old)

"Main" tree

750 (" ", chrysalepis)

Lots of last years acorns

TOTAL 1850

mostly chrysalepis, some agrifolia.

Melanerpes formicivorusLower Arnold 2Hastings Reservation6 Feb

Start watch 1045, Trying to figure out who's here.
 1200, Most assuredly a ♀ NB here. She flycatches from granary + the Valley Oak east of the granary. At one point, alarm calls given (by A1 birds?) she flies to the upper roost hole, enters, and stays several minutes. Two other birds also here, one of which is certainly an unbanded ♂. The third bird (I saw all 3 in the granary appeared to be ♂ and appeared to be banded. Perhaps the 1st yr ♂ (now orphaned) 611? I'll need to look more closely.

7 Feb

Start 1030. 1045 everything looks clear. ♀ NB, ♂ NB, and ♂ 611 ^{Metal / DBLue-LGreen} DBLue-wht / LGrn-white all here, and they all look quite cozy. Very interesting. It's difficult to see how ♂ 611 could be related to either of this birds, as ma (♀ 507) and pa (♂ 610) are both gone. All 3 together in granary, Valley Oak perch tree, etc, with no sign of any ill will. Even wakas between the ♂♂. End 1120.

12 Feb

Some action here while watching roosting, ♀ ^{Red/Red} M / from A1 intruding (persistently) and chased (persistently by an unknown LA2 resident (either ♀ NB or ♂ 611, probably not ♂ NB). They were going at it persistently chasing each other around in the blue oaks behind the granary (about 1730) when an alarm call went up from somewhere, and the two birds froze, only 1 m apart, in a tree behind the granary. They remained motionless for 10-15 min. Roosting, two birds in the back hole, one (banded?) in the granary high hole.

Melanerpes formicivorusLA2

- 7 April Start watching here 1330. ♀637 ^{CPnk/BK}, ♂846 NB plus a 3rd male (presumably ♂611) here. 1345, ♀637 chases out a ♀ NB intruder. 1355, ♂611 ^{Blue-whit/Lgreen-whit} here, too. Good. Weird group still intact.
- 14 May Watching here 1500 ♂611 ^{M/DBLue-LGreen} and ♀637 ^{CPnk/Black} here for sure. Probably the third bird, ♂846 NB present as well. They still have a very few acorns remaining in the Blue Oak granary (~35). Doesn't look like ♂ (♂♂?) are tightly packed with ♀. End 1600
- 17 May Start 1115. ♀637 ^{CPnk/BK} and at least 1 ♂ here flycatching from the big Valley Oak. ♀637 left alone for a long period, suggests: (a) Not ready to nest (b) already have a nest (c) only 1 ♂ here. 1200, ♀637 and ♂611 ^{Metal/Blue-whit/Lgreen-whit} here all the time. No evidence of a 3rd bird at least as far as I could tell. Perhaps LA2 is down to a pair. As far as nesting goes (1) The back hole currently appears to be occupied by nesting Bluebirds. (2) I saw ♂611 and ♀637 take a long hard look at a hole in the top of a broken stub of a Golden Oak near the bottom of South ravine. Fortunately, neither bird went in. Hope they don't nest there. (3) A large Black Oak just west of the previous tree might be worth looking at for hole possibilities.
- 22 May ~~Watching here~~ ¹⁵⁰⁰ These guys have pulled a fast one. After watching here awhile, I see ♀637 fly into the low hole of the granary. I flush her out, climb up to the hole, and find 3 just hatched nestlings and one egg that has a chance of hatching as well. Too bad. Considering

Melanerpes formicivorusLA2

(22 May) the fact that I watched here 14 + 17 May and never saw a bird in or at the hole, they must have had pretty low nest attentiveness. Anyway, it's a safe bet (or fairly safe) that the clutch size was 4 and hatching occurred today. Also looks like only ♂611 + ♀637 are present here, so a pair instead of an unrelated trio. Too bad.

26 May Checked the nest, 1810. 3 very cold babies, no egg. (I was trying to watch the group from a distance, but the birds refused to go to the hole. The 4th egg ^{22 May} I saw was gone. I suspect that it hatched, + the young died. It seems a bit early to be tossing out eggs, but you never know. Still, being conservative suggests that we can't say how many eggs hatched.

17 July Watching at LA2, I see juv 698 Metal/LBlue near the LA2 granary at 0845, before it flies off toward LA2 1100, at LA2 I find J698 eating an acorn. Still a few acorns here

18 July Again in passing 1210, J698 m/LBlue in the granary. 2 other birds as well, but they both flushed quite early as I walked up.

13 Sept A good census here, starting 0900. ♂611 ^{M/DBLue-LGreen} DBLue-wh/LGrn-wh, ♀637 ^{LPink/BLK} and J697 (not seen previously) ^{BLK-yellow/m} looking like he may be in ♂ plumage. Birds appear to be gathering green acorns from the far, far side of South Ravine 0940, starting to worry a bit about J698. End 1000. These guys out of acorns.

14 Oct Storing has begun! ~100 new acorns (Blue Oak?) in the granary.

BIK-166n-BIK

M / L6n-BIK

1981

R.C. Mumme

48

Melanerpes formicivorusLower Arnold 22 Nov

A struggle 1200-~~14~~1300 but I do get a complete
 census here. ♂ 611 ^{M / DBlue-Lbrn} DBlue-wht / Lbrn-wht, ♀ 637 ^{LPk / Blk} M /
 J 697 ^{Blk-Yellow / M} (in ♀ plumage), J 698 ^{DBlue / LBlue} M / LBlue
 (in ♂ plumage). "Lots" of acorns here, for this

granary anyway.

11 Dec

Counted stores, 1600.

Main granary ~~400~~ 200Elsewhere 300TOTAL ~~400~~ 500

♂ 611 seen here in passing.

1981

R.L. Mumme

1

Melanerpes formicivorusFanny Arnold(27 May)

Start watch here 0840. Walter found one egg in the nest yesterday, watching for behavior. 0845, the first thing I see is ♀614 Bk-Grn(N)/Metal from Finch (!) intruding here, mildly supported by ♀652 Yellow/Metal!

0950, Very difficult watching here. Unable to get any real data, but I have the definite impression that ♂651 is not following ♀652. Both birds seen well, but only once together.

22 June

Here in passing, I see ♂651 feed at the nest, so nest still in progress.

30 Aug

I stroll past here at 0930, sit down, and by 0935 I have a complete census! ♂651 DGrn/M, ♀652 Yellow/M, and both juvies 705 M/Red-wht + 706 M/LGreen-DGreen all seen well in the granary-nest tree-roost tree area. Even a bit of intruder action by a ♂NB. chased most vigorously by J705.

14 Oct

Start 1430
Real confusion here: After seeing ♀652 fighting with the new ♀ at WA2, I stroll up here. I find both Juvies, M/Red-wht J705, Red/LGrn-DGrn and J706 M/" " But also here, looking like she belongs (in the roost tree, wakas with the juvies) is ♀567 Red/Red M/Red of A1. 1450, no sign of ♂651 yet. What's going on? Why is ♀652 acting like she's abandoning?
Storage hasn't started yet, near as I can tell. J706 looks like it might molt ♂, but both juvs still look young (dark eyes, small bills)
1530, Only the juvies around now. No sign of ♂651. Also unclear what ♀567's intentions are. I saw her with A1 birds earlier and she seen to be not around at the moment.

0945 ♂ 651 / ♀ 652

0950 " "

0955

1005 ♀ 652 roost / ♂ 651 L

1010 ♂ 651 g

Melanerpes formicivorusFanny Arnold

2 Nov New developments here, 1100. ♀567 ^{Red / Red} m / " from A1
 has definitely moved here, seen storing acorns with
 J706, Metal / Lbrn - Dbrn. J705 ^m DBlue / Red-wnt also here,
 although not seen storing, but both juveniles appear to be
 in ♂ plumage (not totally convinced). So we seem to
 have a 2 ♂ 1 ♀ group. This brings up the question
 of why ♀652 (apparently) abandoned? Was it the
 disappearance, presumed death of ♂651? That left her
 with 2 ♂ (?) offspring with which she could not mate.
 Maybe, but why didn't she try to attract a new ♂?
 I'll have to watch at UA2 to see if her efforts
 at gaining admission to that group were successful or not.

Also good to note that ♀567 definitely had
 sisters available with which to disperse

10 Nov A quick look, ♂♂ 705, 706, ♀567 all here:

Melanerpes formicivorusBianca

3 Dec 1500, Bless my bones, Bianca is occupied! Maybe 100 or 50 acorns stored in the "halfway fallen" limb on the knoll. 1530, on the Divide between Black Oak and Bianca, I find at least 3 unbanded birds, perhaps a 4th bird as well. At least 1, probably 2 (or even 3) of the birds are ♂ NB. I think a ♀ NB is around, too. Confused near the end, as a couple of Black Oak birds (♂ 321, ♀ 689) around, and chasing, etc.

1600 4 friendly looking birds together on the open-top Valley Oak on Bianca ♂. Could it be 4 immigrants for sure? Wouldn't think this territory could hold 4 birds. But anyway, 2 ♂♂, 2 ♀♀, all unbanded!

11 Dec Counted stores, 1630: About 250 Total, scattered about. Lots of empties. These guys will have to do better than that.

